

Journal of the Turkish-German Gynecological Association

Dear colleagues,

We will be organizing the 11th Turkish German Gynecology Congress on 11-15 May 2016 in Belek Antalya. The 10th episode of this series of meetings had been realized in 2014. Now we are happy to invite all our dear friends and colleagues to this forthcoming scientific event.

This time our congress venue will be the newly constructed Sueno Hotels Deluxe's Convention Center in Belek.

Our 11th congress will both act as a means for our colleagues to catch up with the current developments in our field in the most efficient way and also as a means of escaping the routine and stresses of the daily life, meeting with friends and fellows in a relaxing atmosphere. We are pretty confident that you will be happy to benefit from the rich scientific agenda of the congress and also will enjoy the atmosphere and fascinating social program.

At this year's congress every morning we will be having keynote lectures with the world's most reputable speakers; May 11, Wednesday Prof. Sara Brucker (Surgical Gynecology - Quo Vadis?) and Prof. Camran Nezhat (Future Surgeons, Future Surgeries and Future Training), May 12, Thursday Prof. Serdar Bulun (Targeting stem cells to treat uterine leiomyomas), May 13, Friday Prof. Karl Oliver Kagan (Pregnancy as window for future health) and May 14, Saturday Prof. Uzi Beller ("Preventing Ovarian Cancer" – A strategy with hope). In addition, our congress will have two live surgeries, one from France the other from USA, with the moderation by Prof. Ceana Nezhat.

In our forthcoming 11th congress, besides having an enriched scientific program, we are also having pre-congress courses. Even though we have newly announced our courses there seems to be an overwhelming demand, due to this we kindly ask you to realize your registration without further delay. Hope to see you all in Antalya on May 11, 2016.

Yours sincerely,

Cihat Ünlü, MD. Prof.
Congress President

Peter Mallman, MD. Prof.
Congress President

The presentations which were accepted, but has not been presented in the congress are regrettably omitted from the supplement.

2016 TAJEV / Oral Presentation

[OP-001]

Neutrophil lymphocyte ratio, platelet lymphocyte ratio and mean platelet volume; which one is more predictive in the diagnosis of pelvic inflammatory disease?

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Objective: In the present study, we aimed to assess and compare the utility of complete blood count (CBC) parameters and C-reactive protein (CRP) in the diagnosis of pelvic inflammatory disease (PID).

Material and Methods: Sixty-six patients diagnosed with PID, and 200 healthy control subjects were included in this case-control study. The groups were compared in terms of demographic properties such as age, parity, body mass index (BMI), hemoglobin value, neutrophil count, platelet count, neutrophil/lymphocyte ratio (NLR), platelet/lymphocyte ratio (PLR), mean platelet volume (MPV) and CRP.

Results: The groups were similar in terms of age, parity, BMI, hemoglobin and platelet count values ($p>0.05$). Neutrophil counts, CRP values, NLR and PLR were significantly higher and the MPV values were significantly lower in the study group ($p<0.05$) (Table 1). The parameter with highest sensitivity and specificity was NLR, which had similar diagnostic sensitivity and specificity as CRP (Table 2).

Conclusions: While the most commonly used laboratory tests for the diagnosis of PID are WBC, neutrophil and CRP, NLR should be con-

Table 2. The diagnostic values of blood parameters in pelvic inflammatory disease

Parameter	Cut-off	AUC	Sensitivity	Specificity	PPV	NPV
CRP ^o	10.5	0.915	90	85	86.32	84.35
NLR ¹	2.674	0.915	87	82	84.33	76.00
PLR ²	131.548	0.576	65	66	41.57	52.35
MPV ³	6.75	0.323	60	19	34.38	15.59
Leukocyte	8.92	0.765	82	69	73.12	52.35
Neutrophil	6.15	0.890	78	68	60.44	54.59
Lymphocyte	1.75	0.359	63	14	37.38	11.02
Platelet	277.000	0.587	64	57	38.89	47.05

^oCRP: C-reactive protein, ¹NLR: Neutrophil/lymphocyte ratio, ²PLR: Platelet/lymphocyte ratio, ³MPV: Mean platelet volume

sidered as an even more sensitive marker. It was concluded that NLR could be used in addition to other CBC parameters for the diagnosis of PID.

Keywords: Mean platelet volume, Neutrophil Lymphocyte ratio, Platelet lymphocyte ratio, Pelvic inflammatory disease, C-reactive protein

[OP-002]

Retrospective analysis of 114 cases treated cause dermoid cyst at the hospital of Zeynep Kamil

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Objective: The Objective of this study is to evaluate the clinical findings, tumor marker levels, surgical treatment approaches and final pathological results of the dermoid cyst subjects treated at our hospital.

Material and Methods: Our study is planned as retrospective. 114 subjects from our hospitals electronic log system were involved in our study. Along with the demographic data's, pre-operative clinical findings, tumor sizes, ultrasonographic characteristics, tumor marker results, surgical treatment method (laparotomy-laparoscopy), administered surgical treatment procedure (cystectomy, oophorectomy, salpingo-oophorectomy, total abdominal hysterectomy-salpingo-oophorectomy) and pathology results were noted from the patient files.

Results: Average ages of our patients were determined as 33.59±12.79 years (age between 11 and 70). Abdominal pain which determined in 32 patients (28.07%) was determined as the most common complaint during apply to the hospital. It has been seen that 70 patients (38.59%) were determined as incidental. Average cyst size was determined as 47.70±48.49 cm² during the ultrasonographic examination. Ca 125 level was determined as higher than normal in only 12 (10.52%) of the patients and Ca 19-9 level was determined as higher than normal in only 29 (25.43%) of patients included in the study. According to the

Table 1. Comparison of study and control groups in terms of demographic and blood values.

Parameters	Study group (n=66) Mean± SD	Control group (n=200) Mean± SD	p value
Age (years)	29.65±4.23	28.18±5.55	0.97
Parity	3.92±1.39	2.97±2.23	0.083
BMI ^o (kg/m ²)	22.18±2.36	23.63±3.11	0.345
Hemoglobin (gr/dl)	11.98±1.58	12.25±1.07	0.762
Platelet	314.90±116.67	272.57±72.13	0.069
Neutrophil	10.88±5.23	4.83±1.69	0.002
CRP	18.56±8.16	3.89±2.45	0.001
NLR ¹	6.28±5.12	2.13±0.83	0.001
PLR ²	172.305±84.17	121.27±40.20	0.002
MPV ³	7.47±1.94	8.49±1.44	0.025

^oBMI: Body mass index, ¹NLR: Neutrophil/lymphocyte ratio, ²PLR: Platelet/lymphocyte ratio, ³MPV: Mean platelet volume

final pathology results, the most common result was dermoid cyst which was determined in 103 (90.40%) patients. Other histopathological results were immature teratoma, squamous cell carcinoma and serous carcinoma.

Conclusion: Ovarian dermoid cysts are usually benign neoplasms and rarely show malign transformations. Tumor markers are not fairly enough to make discriminations. However especially in older patients treatment should be done cautiously due to the raised risk of malignity.

Keywords: Dermoid cyst, ultrasonography, age, histopathologic content

[OP-004]

Very rare etiology of hemoperitoneum: ovarian fibroma

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Introduction: Ovarian fibromas are benign tumors classified as sex cord-stromal tumors. They constitute about 2% of all ovarian tumors. They are generally observed in middle-aged women (Maccio et al., 2014). They may be asymptomatic without any typical clinical signs. However, they may result in a clinical picture, namely Meigs' syndrome, which includes ovarian fibroma, free ascites in the abdominal cavity, and hydrothorax in 1-3% of the cases (Meigs, 1954). An increase in the level of CA 125 rarely accompanies this clinical picture; in addition, hemoperitoneum is a very rare situation. We present herein a case of ovarian fibroma, in which the preoperative benign or malignant nature could not be differentiated, and presented with hemoperitoneum.

Case: A 32-year-old patient who was diagnosed with uterine myoma by MRI was referred from another center with anemia and abdominal pain. Upon physical examination, the patient had guarding and rebound tenderness. The ultrasound examination revealed a hyperechoic fluid in the abdomen and a solid mass with a diameter of approximately 15 cm in the right adnexal region. Preoperatively, the patient's CA 125 level and hemoglobin level were 63 U/ml and 6 mg/dl, respectively. Two units of erythrocyte suspensions were transfused preoperatively. Post-transfusion hemoglobin was 9 mg/dl. The patient was taken in to the operating room with the frozen section ready. The abdomen was entered through a lower midline incision below the umbilicus. On exploration, diffuse hemoperitoneum was detected in the abdomen. A solid mobile mass with a diameter of approximately 15 cm was found in the right adnexal region originating from the ovary with regular borders and there was no bleeding on surface of the mass. Other intra-abdominal organs were observed to be natural. A right salpingo-oophorectomy was performed. Intraoperative frozen section examination revealed fibroma. After the final intra-abdominal checks, the operation was terminated. The patient's postoperative course was uneventful and the patient was discharged with recommendations. The section of the solid tissue was red with a smooth external surface, with a diameter of 14 cm, hemorrhagic in most fields, and in grayish white in patchy areas. Microscopically, edematous and hemorrhagic tumor tissue was observed extensively.

Discussion: Ovarian fibromas are found in 2-5% of surgically removed ovarian tumors. However, Meigs' syndrome is observed in approximately 1% of cases and ascites are present in 10-15% of those with ovarian fibromas (Young and Scully, 1988).

Meigs syndrome generally presents with serous transudative effusion (Meigs 1954). Rarely, hemorrhagic fluid associated with benign ovarian

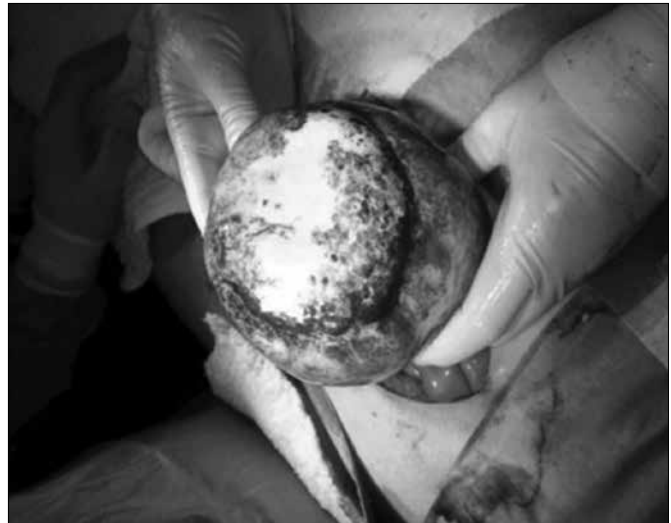


Figure 1. Intraoperative appearance of solid mobile mass in the right adnexal region originating from the ovary with regular borders.

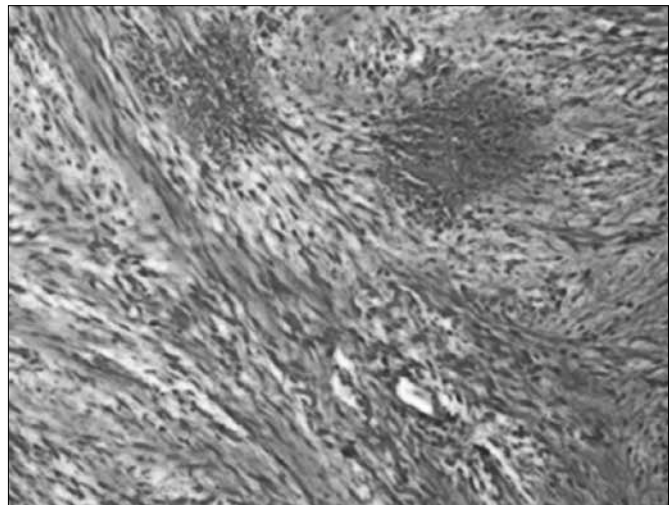


Figure 2. Bundle forming spindle cells and collagen fibers together with hemorrhagic foci were observed (H&E x100).

tumors has been observed (Agaba et al. 2007). Agaba et al. reported one case that was associated with Meigs' syndrome and hemorrhagic pleural effusion (Agaba et al., 2007). In addition to benign gynecological pathologies such as ectopic pregnancy, ovarian cyst rupture, uterine fibromas, and malignant pathologies such as ovarian tumors should also be considered in the differential diagnosis of hemoperitoneum (Peng et al., 2015, Togami et al., 2015, Bastu et al., 2013). In conclusion, fibromas may present with hemoperitoneum, solid adnexal mass, increased levels of CA 125, and symptoms of acute abdomen.

Keywords: hemoperitoneum, Ovarian fibrom, Abdominal pain

[OP-005]

Evaluation of risk factors for the recurrence of ovarian endometriomas

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Objective: To evaluate the risk factors for the recurrence of ovarian endometrioma after laparoscopic cystectomy.

Material and Methods: Reproductive aged patients who underwent laparoscopic ovarian endometriotic cystectomy and with histopathologically confirmed diagnosis of ovarian endometrioma were evaluated retrospectively. Histopathologic specimens were reevaluated and histopathologic characteristics of ovarian endometriotic cysts (thickness of cyst wall, thickness of fibrosis (ToF), thickness of ovarian tissue, the number of follicles per cyst, the depth of penetration (DoP) of endometrial tissue into the cyst wall) were determined. Along the determined histopathologic findings, demographic characteristics (age at surgery, number of pregnancies), clinical symptoms (dysmenorrhea, infertility), intraoperative findings (revised American Society for Reproductive Medicine stage and total score), imaging features (bilaterality, cyst diameter), and biochemical parameters (Ca125, Ca19.9, Ca15.3) were evaluated as possible risk factors for the recurrence of endometrioma. The variables with $p < 0.2$ in univariate analysis were introduced into regression analysis to determine the risk factors for recurrence.

Results: There were statistically significant differences in age group (≤ 35 years and > 35 years), the ToF and DoP between patients with recurrence and those with no recurrence. In Cox regression analysis, age ≤ 35 years and DoP were significant risk factors for presence of recurrence. DoP, ToF, preoperative cyst diameters in ultrasonographic examination were reversely correlated with recurrence interval. In multivariate regression analysis, the DoP was found the only significant risk factor for the recurrence interval. 1200 μm of DoP was found as the optimum cut off value according to Youden index criteria in ROC curve analyse. The sensitivity (62.9%), specificity (75%) were obtained at the cut off value of 1200 μm for DoP.

Conclusion: Histopathological features of ovarian endometriotic cyst may have important roles on predicting the recurrence of the endometrioma. Predicting the recurrence risk of particular patient is very important in future management of the disease. Knowing the recurrence risk of an endometrioma will help in deciding the optimal treatment modalities for each individual patient. High risk patients should be offered appropriate treatments according to the clinical status without delay and low risk patients should be protected from overtreatment.

Keywords: Endometrioma, histopathologic parameters, recurrence, recurrence interval

[OP-006]

BRCA1 and BRCA2 sequence variations detected with next generation sequencing in patients with premature ovarian insufficiency

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Objective: Although the association between BRCA1 and BRCA2 gene mutations and breast and ovarian cancer is known, there is not yet sufficient data in premature ovarian insufficiency (POI). However, several studies reported that there might be a relationship between POI and BRCA1 and BRCA2 gene mutation. We aimed to investigate the role of BRCA1 and BRCA2 gene mutations in the etiology of POI in Turkish population.

Material and Methods: The cohort was classified in two groups, study group consisted of 56 individuals diagnosed as premature ovarian insufficiency (younger than 40 years of age, antral follicle count < 3 -5, FSH levels $> 12\text{IU/L}$) and control group included 45 fertile individuals. A total of 101 individuals were analyzed by next generation sequencing to detect BRCA1 and BRCA2 gene mutations.

Conclusion: We detected 4 new variations (p.T1246N and p.R1835Q in BRCA1 and p.I3312V, IVS-7T>A in BRCA2) which have not been reported before. We did not find an association between the BRCA1 and BRCA2 gene mutations and premature ovarian insufficiency. However larger and functional studies are needed to clarify the association.

Keywords: BRCA1, BRCA2, infertility, next generation sequencing, Premature ovarian insufficiency

Table 1. BRCA1

Exon	cDNA	Protein	SIFT (0-1)	Variation class (USID)	Polyphen-HumDiv	Polyphen-HumVar	GVGD	Domain	Control group % (n:45)/ Study group % (n:56)
7	c.536A>G	p.Y179C	0	1		0,85	Class45	-	2(1)(0)
10	c.1047A>G	p.Q354R		1			Class0	BRCTTumor	16(7)(14)
10	c.2077G>A	p.D693H		1			Class0	SH3	20(9)(9)
10	c.2612C>T	p.P871L		1			Class0	SH3	6(0)(0)
10	c.3113A>G	p.E1038D		1			Class0	-	6(0)(7)(54)(0)
10	c.3119G>A	p.E1043H		1	0,61		Class0	-	2(1)(2)
10	c.3541G>A	p.V1181I	0,28	1		0,01	Class0	-	0(0)(2)
10	c.3541A>G	p.K1183R		1			Class0	-	62(27)(54)(0)
10	c.3737C>A	p.T1246N	0	Not reported			Class0	-	0(0)(2)
10	c.4456T>C	p.F148L	0,22	-				BRCTTumor	2(1)(0)
10	c.1648A>C	p.N550H	0,61	-	0,99	0,03		-	2(1)(0)
12	c.4342A>G	p.E1440G	0,61	3	0,33		Class0	-	0(0)(2)
14	c.4535G>T	p.S151Z	0,61	1		0,13	Class0	-	2(1)(0)
15	c.4837A>G	p.S1613G		1			Class0	-	64(27)(54)(0)
15	c.4837T>C	p.M1628T		1			Class0	-	2(1)(0)
15	c.4936G>A	p.M1652I		1			Class0	BRCT	4(2)(2)
23	c.5564G>A	p.R1835Q	0,62	Not reported			Class0	BRCT	2(1)(0)

Table 2. BRCA2

Exon	cDNA	Protein	SIFT (0-1)	Variation class (USID)	Polyphen-HumDiv	Polyphen-HumVar	GVGD	Domain	Control group % (n:45)/ Study group % (n:56)
3	IVS3-7T>A	-		Not reported				-	2(1)(0)
10	c.565A>C	p.N203H		1			Class0	-	3(1)(3)
10	c.1114A>C	p.H372H		1				-	4(1)(0)(45)(0)
10	c.1368G>C	p.S454D	0,04	-	0,85	0,32	Class0	-	2(1)(0)
11	c.2971A>G	p.N991D		1			Class0	-	9(0)(1)(6)
11	c.3746C>T	p.T1215M		1			Class0	-	4(2)(4)(2)
11	c.4258G>T	p.D1420T	0	1	0,83	0,01		-	4(2)(2)(1)
11	c.4853A>G	p.I2285V	0,12	2	0,61	0,14	Class25	-	0(0)(2)(1)
11	c.6180C>T	p.R2034G		1			Class0	-	0(0)(2)(1)
11	c.3318C>G	p.S1106R	0	-	1	1		-	2(1)(0)
11	c.2919G>A	p.S973E		-				-	2(1)(0)(0)
10	c.818G>T	p.K2729H	0,07	3	1	0,93	Class35	BRCA2CDBD_OB1	2(1)(2)(1)
22	c.8851G>A	p.A2951T		1			Class55	BRCA2CDBD_OB2	2(1)(4)(2)
26	c.9581C>A	p.C3194Q	0,12	3	1	0,95	-	-	0(0)(2)(1)
27	c.9924A>G	p.I3312V	0,83	Not reported	0	0	Class0	-	0(0)(2)(1)
27	c.10234A>G	p.I3412V		1			Class0	-	0(0)(2)(1)
27	c.9976A>T	p.K3328E		1				-	4(2)(2)(1)

[OP-007]

Trends over years in approaches of hysterectomy for benign indications in a tertiary referral center

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Objective: Hysterectomy is the most common operation performed by the gynecologists. Hysterectomy is done for many indications using any of a variety of techniques and approaches which are abdominal, vaginal, laparoscopic or robotic. In this operation, uterine corpus and cervix is removed with or without bilateral ovaries and tubes depending on the patient's age and a variety of other factors. Abdominal hysterectomy involves removal of the uterus through an incision in the lower abdomen. Vaginal hysterectomy is defined as removal of the uterus via the vagina. Laparoscopic hysterectomy involves "keyhole surgery" through small incisions over the abdomen and uterus may be removed through vagina or one of the small incisions after morcellation. In robotic surgery, the operation is performed by a robot steered by the human. Uterine leiomyoma is the most common indication for hysterectomy. Endometriosis, cancer, abnormal bleeding, pelvic inflammatory disease, uterine prolapse are encountered as other indications for this operation. The aim of this study is to determine the change in approaches of hysterectomy over years in a tertiary referral center.

Material and Method: We examined the number of hysterectomy in the Department of Obstetrics and Gynecology at Kanuni Sultan Süleyman Training and Research Hospital between January 2010 and January 2016. The approaches preferred were recorded for each operation.

Results: Laparoscopic hysterectomy had not been performed between January 2010 and 2012. Each year, percentage of abdominal hysterectomy decreased steadily from 96.2% to 54.2%. vaginal hysterectomy initially increased, then the ratio remained nearly constant approximately at 15%. The important finding was that minimally invasive surgery increased in time suitable with trends all over the world (Table 1).

Results: Abdominal hysterectomy continues to be the most common approach, but vaginal hysterectomy has been associated with fewer complications, shorter hospital stay, more rapid recovery, lower overall costs. But there are many limitations for vaginal hysterectomy especially in patients with concurrent pelvic disease, large uterus or in patients with absence of prolapse. Because of these reasons, recently laparoscopic and robotic hysterectomy became more feasible and have been applied more frequently. Laparoscopic hysterectomy has many advantages such as less postoperative pain, shorter hospitalization, faster return to work, less blood loss, fewer postoperative complications, better cosmesis and reduced hospital cost. Kroft et al defined the rate of minimally invasive hysterectomy for benign indications as 36%. Another study found that the percent of laparoscopic hysterectomy increased from 11% to 29%. Approach depends on surgeon's and patient's choice, surgeon's experience and skill, indication for operation and patient's characteristics. All benefits and hazards about approach should be discussed with patient and final decision should be taken. Laparoscopic and robotic hysterectomy continues to be a valuable alternative for abdominal hysterectomy especially in obese patients.

Conclusion: As in our hospital, with learning curve to perform advanced laparoscopic procedures and technological developments, laparoscopic hysterectomy an even assisted robotic hysterectomy has been preferred by the surgeon and the patient.

Keywords: hysterectomy, laparoscopy, vaginal

[OP-008]

Neutrophil / lymphocyte ratio as new-inflammatory biomarkers Primary ovarian insufficiency (POI) patients

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Objective: Primary ovarian insufficiency (POI) is a disease without completely elucidated etiology. Genetic, immunological and environmental factors are thought to play a role for POI etiology. According to recent studies, Neutrophil / lymphocyte ratio (NLR) was been found to be a good indicator of inflammatory conditions. We investigated the relationship between the NLR ratio for POI patients.

Introduction: Primary ovarian insufficiency (POI) is defined as the development of hypergonadotropic hypogonadism before the age of 40 years. The condition was previously referred to as "premature menopause" and "premature ovarian failure." POI is characterized by a change in menstrual function (oligomenorrhea and/or amenorrhea), elevated serum gonadotropin and low serum estradiol concentrations, and estrogen deficiency symptoms. There are several known causes of ovarian failure, including chromosomal defects like Turner syndrome and fragile X syndrome premutation carriers, exposure to radiation and certain drugs, and autoimmune disease. Unfortunately, the etiology remains unknown in approximately 75 to 90 percent of cases. In terms of an individual's risk of developing POI, it is important to develop a strategic management plan and the investigation at an early stage.

In recent years, there has been renewed interest in hematological parameters such as neutrophil to lymphocyte ratio (NLR) and are designated as predictors of endothelial dysfunction and inflammation. We aimed to investigate relationship between the NLR for POI patients.

Material and Methods: Forty five patients with POI which had ongoing treatment in gynecology outpatient follow-up of Sakarya University Research and Education Hospital were enrolled to study. The patient's hematological parameters were studied retrospectively. For control group hematological parameters of 50 women admitted to the gynecology clinic for still other reasons with menstrual and hormonal profile were normal, no chronic diseases.

Results: The average age of patients diagnosed with POI was 37, and control group was 35. POI group average neutrophil count was 3, 5 (103/mL), and for control group was 4, 5 (103/mL). The average number of lymphocytes in the control group was found 2, 4 (103/mL), and for POF group was 2, 3 (103/mL). The NLR rate of 1.5 ± 0.5 was found for POF group, and $1, 8 \pm 1$ for the control group. There were no statistically significant differences between the groups for NLR.

Conclusion: NLR represents a combination of two markers where neutrophils represent the active nonspecific inflammatory mediator

initiating the first line of defense, whereas lymphocytes represent the regulatory or protective component of inflammation. Autoimmunity was first postulated as a cause of POI when it was noted that some women with adrenal insufficiency also had ovarian insufficiency. Young women with spontaneous POI are also at increased risk of autoimmune hypothyroidism and asymptomatic autoimmune adrenal insufficiency. Inflammation disorders are one of the components of this situation. In our study there was no significant difference for NLR between POF and control groups. This result may be a result of the low number of patients for this study. We believe that need of a study with a greater number of patients with all etiologic factors consideration.

Keywords: Primary ovarian insufficiency, Neutrophil/lymphocyte ratio, inflammatory biomarker

[OP-009]

[OP-010]

An unruptured second trimester live tubal ectopic pregnancy which was misdiagnosed as abdominal pregnancy

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Tubal ectopic pregnancies mostly become symptomatic in the first trimester. A small number of tubal pregnancies have advanced beyond this. In the present case a live, unruptured advanced tubal pregnancy at 15 weeks is described (figure 1). Tubal pregnancy located in the ampullary part of tuba uterina created a diagnostic dilemma with abdominal ectopic pregnancy. Because of the high incidence of life-threatening risks, immediate laparotomy is applied. Upon laparotomy unruptured left tubal ectopic pregnancy was confirmed as a mass of 12x4x4 cm. Left tuba was subsequently removed. The patient had an unremarkable post-operative course and was discharged home two days after the surgery. Pathologist reported that ectopic pregnancy was originated from the ampulla of tuba uterina (figure 2).

Keywords: Ectopic pregnancy, second trimester, tuba

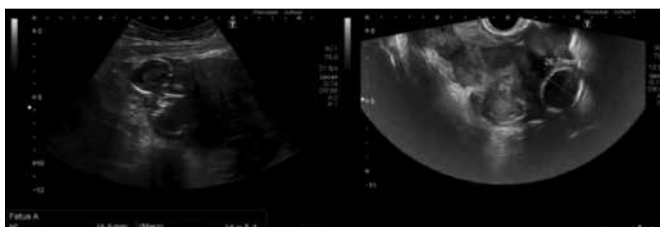


Figure 1. Trans-abdominal and trans-vaginal ultrasound revealed an average gestational age of 14 weeks and 5 days live fetus according to biparietal diameter (BPD) of 26,7 mm and humerus length of 15,5 mm on the left adnexial zone



Figure 2. Pathologist reported that ectopic pregnancy was originated from the ampulla of tuba

[OP-013]

Influence of the type of hysterectomy on sexual and psychological condition

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Objective: To investigate whether there were any differences in the quality of life, sexual function, and self-esteem in patients who have undergone total laparoscopic hysterectomy (TLH) and total abdominal hysterectomy (TAH).

Material and Methods: All premenopausal patients who underwent TLH or TAH due to benign uterine disorders were enrolled. The sexual function and quality of life status were assessed preoperatively and 6 months postoperatively using three standardized validated questionnaires: the Arizona Sexual Experiences Scale (ASEX), the Symptom Checklist-90-Revised (SCL-90-R), and the Rosenberg Self-Esteem Scale (RSES), respectively.

Results: Preoperative ASEX, SCL-90-R, and RSES scores were not different among the hysterectomy subgroups. The postoperative SCL-90-R scores were also not different among the hysterectomy

Table 1. Distrubiton of theASEX score according to the groups

FemaleArizona Sexual ExperienceScale	Group 1 (TAH)	Group 2 (TLH)	P value
Sexual Drive			
Preoperative	3.3± 1.2	3.6±1.2	0.185
Postperative	2.7±1.0	1.7±0.8	0.000
Preop-PostopDifference	0.7±1.1	1.9±1.4	0.000
Difference p	0.000	0.001	
Arousal			
Preoperative	3.4±1.3	3.8±0.9	0.138
Postperative	2.7±1.1	2.0±0.8	0.002
Preop-PostopDifference	0.7±1.1	1.8±1.2	0.000
Difference p	0.000	0.001	
VaginalLubrication			
Preoperative	3.1±1.0	3.4±0.8	0.180
Postperative	2.5±0.8	2.3±0.9	0.258
Preop-PostopDifference	0.1±1.0	1.0±1.1	0.051
Difference p	0.000	0.002	
Ability to Reach Orgasm			
Preoperative	3.4±1.1	3.4±1.2	0.796
Postperative	2.7±1.1	2.8±1.1	0.846
Preop-PostopDifference	0.8±1.5	0.7±1.2	0.895
Difference p	0.002	0.0091	
Satisfaction with Orgasm Score			
Preoperative	2.9±1.2	3.0±1.2	0.679
Postperative	2.4±1.2	2.0±1.0	0.105
Preop-PostopDifference	0.6±1.1	1.0±1.4	0.064
Difference p	0.000	0.004	
Total Score			
Preoperative	16.1±4.3	17.2±3.7	0.135
Postperative	12.9±3.7	10.8±2.1	0.008
Preop-PostopDifference	3.2±3.9	6.4±3.3	0.000
Difference p	0.000	0.000	
Data are expressed as mean ± S.D.P achievedfrom Mann-WhitneyorStudent t test and difference P achievedfromPaired t test orWilcoxon test according to distribution of data			

subgroups. The postoperative RSES scores were significantly lower ($p < 0.05$) than the preoperative scores for all procedures (indicating improved self-esteem) but did not differ among the groups. The postoperative ASEX scores were significantly decreased ($p < 0.01$) as compared with the preoperative scores. When the average scores of each item of the ASEX score were compared in both the groups, significant differences were observed in the sexual drive and arousal in the laparoscopy group ($p < 0.01$).

Conclusion: Women undergoing TLH for benign uterine disease may have better outcomes related to certain sexual function parameters than women undergoing TAH

Keywords: Total Abdominal Hysterectomy; Total Laparoscopic Hysterectomy, ASEX score; sexual function, Self-esteem, Quality of life

[OP-014]

Circulating SCUBE1 levels are elevated in lean glucose-tolerant women with polycystic ovary syndrome

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Objective: Polycystic ovary syndrome (PCOS) is thought to represent an early manifestation of metabolic syndrome, which is associated with cardiovascular disease. Signal peptide-CUB (complement C1r/C1s, Uegf, and Bmp1)-EGF(epidermal growth factor) domain-containing protein 1 (SCUBE1) is a platelet activation marker that plays important roles in vascular biology and has been closely linked to cardiovascular events. In the present study, we investigated SCUBE1 levels in lean glucose-tolerant women with PCOS and assessed the possible association between SCUBE1 levels and hormonal and metabolic features of women with PCOS.

Material and Methods: The study population consisted of 90 lean (body mass index [BMI] < 25 kg/m²) women diagnosed with PCOS using the Rotterdam criteria and 100 age- and BMI-matched healthy controls with no clinical or biochemical feature of hyperandrogenism. Glucose tolerance was evaluated in all subjects before recruitment using the 2-h 75 g oral glucose tolerance test, and only those exhibiting normal glucose tolerance were enrolled. Complete blood count, hormonal and metabolic parameters, and serum SCUBE1 levels were evaluated.

Results: Circulating SCUBE1 levels were significantly higher in women with PCOS than in controls (5.9 ± 3.9 vs. 4.2 ± 1.4 ng/mL, $p = 0.022$). No association between SCUBE1 level and clinical or biochemical parameters was found in the control or PCOS group.

Conclusion: Increased SCUBE1 levels in lean glucose-tolerant women with PCOS reflect increased platelet activation, which may augment the risk of cardiovascular disease later in life

Keywords: platelet activation, polycystic ovary syndrome, SCUBE1

[OP-015]

Lidocaine for pain control during IUD insertion

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Objective: This study was conducted to examine the effects of topical lidocaine spray, lidocaine cream, and lidocaine injection on pain perception during intrauterine device (IUD) insertion.

Study design: Multiparous women at reproductive age were grouped into control, lidocaine cream, lidocaine spray, and lidocaine injection groups. Ten cm visual analog scale was used in all patients to evaluate pain perception at three stages of IUD insertion procedure: Basal:

After analgesic application; Tenaculum: After tenaculum application; Insertion: After IUD insertion.

Results: Two hundred patients were enrolled in the study. Baseline characteristics were similar between groups ($p>0,05$). Pain score for tenaculum were similar in the groups ($p=0,071$). Basal pain scores were significantly higher in the lidocaine injection group ($p<0,001$). Intrauterine device insertion pain scores were lower in the lidocaine spray and injection groups ($p<0,001$).

Conclusion: Lidocaine spray and lidocaine injection lowers pain during IUD insertion. Lidocaine spray application is a good option for reducing the pain felt during insertion of IUD. Spray application is both easy and rapid. Nurses, midwives and health technicians who perform IUD insertion can also use it easily. Paracervical lidocaine injection can also reduce pain during IUD insertion, but the injection itself is also painful. Therefore, we don't see this option as a plausible method for reducing pain during IUD insertion.

Keywords: Intrauterine device, lidocaine, pain

[OP-016]

The impact of insulin resistance on clinical, hormonal and metabolic parameters in lean women with polycystic ovary syndrome

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Objective: This retrospective study was performed to assess IR (insulin resistance) in lean women with PCOS (polycystic ovary syndrome) and to determine its association with clinical, hormonal and metabolic parameters.

Material and Methods: Retrospective analysis of one hundred consecutive lean (body mass index <25 kg/m²) PCOS subjects, aged 18-35 years, who attended to Marmara University Hospital was performed. The diagnosis of PCOS was made according to the 2003-Rotterdam criteria. Hirsutism was evaluated using the modified FGS (Ferriman-Gallwey score). Insulin resistance, defined by HOMA-IR (homeostasis model assessment IR index) was calculated using the following equation: $\text{HOMA-IR} = \text{fasting insulin } (\mu\text{U/L}) \times \text{fasting glucose (mmol/L)} / 22.5$. One hundred lean PCOS subjects were divided into two groups according to HOMA-IR values (IR+ and IR-). A HOMA-IR value above 2.5 was used to indicate IR. Clinical, hormonal and metabolic parameters were compared between the two groups. FAI (free androgen index) was calculated by the formula, $\text{FAI} = (\text{TT (total testosterone) nmol/L} / \text{SHBG (sex hormone-binding globulin) nmol/L}) \times 100$. All data were analyzed using Statistical package for the social sciences (SPSS) 16.0 for Windows. Student's t-test or Mann-Whitney U-test was used for comparisons of the mean between the two groups, as appropriate. The results were considered significant if P values were < 0.05 ; highly significant if $P < 0.01$. Correlation analyses were performed between HOMA-IR and clinical, hormonal and metabolic variables using Pearson's and Spearman's methods in women with PCOS.

Results: One hundred lean PCOS subjects were enrolled in the study, of which 47 were insulin resistant and 53 were not. Table I shows the clinical, hormonal and metabolic characteristics of the two groups

Table 1. Clinical, hormonal and metabolic characteristics of groups

	IR – (n=53)	IR+ (n=47)	p
Age (y)	24.24±3.57	24.87±2.48	0.317
WHR	0.74±0.04	0.78±0.07	<0.001**
BMI(kg/m ²)	22.28±1.69	22.72±2.03	0.232
Systolic blood pressure (mmHg)	112.20±9.89	115.65±10.01	0.087
Diastolic blood pressure (mmHg)	68.15±7.80	72.17±7.36	0.010*
LH (mIU/ mL)	7.71±3.57	8.67±3.46	0.174
FSH(mIU/ mL)	4.59±1.15	4.76±1.09	0.457
E2(pg/ dL)	47.03±12.48	50.03±10.63	0.201
HDL cholesterol (mg/ dL)	55.45±12.52	55.00±10.92	0.849
LDL cholesterol (mg/ dL)	89.99±20.34	93.57±27.00	0.453
Triglyceride (mg/ dL)	92.07±24.14	97.95±32.37	0.302
Total cholesterol(mg/ dL)	166.81±25.18	173.38±26.26	0.205
FGS	5.73±3.24	8.97±5.05	<.001**
SHBG (nmol/L)	29.63±16.11	28.88±15.23	0.812
FAI	5.97±7.05	6.39±3.97	0.724
Total T (nmol/L)	1.32±1.13	1.54±0.96	0.299
DHEAS (μg/dl)	178.26±95.61	163.27±72.69	0.384

Note: Values are expressed as mean±SD. FGS= Ferriman-Gallwey score
HOMA-IR= homeostasis model assessment- insulin resistance FAI=Free androgen index * P<.05, ** P<.01.

Table 2. Correlation between insulin resistance and clinical, hormonal and metabolic parameters in nonobese women with polycystic ovary syndrome

	HOMA-IR r
Age (y)	0.195
WHR	0.500**
BMI (kg/m ²)	0.143
Systolic blood pressure (mmHg)	0.265**
Diastolic blood pressure (mmHg)	0.273**
LH (mIU/ mL)	0.109
FSH(mIU/ mL)	-0.061
E2(pg/ dL)	0.218*
HDL cholesterol (mg/ dL)	-0.123
LDL cholesterol (mg/ dL)	0.033
Triglyceride (mg/ dL)	0.093
Total cholesterol(mg/ dL)	0.065
FGS	0.456**
SHBG (nmol/L)	0.011
FAI	0.151
TT (nmol/L)	0.291**
DHEAS (μg/dl)	-0.051

** p< 0.01.* p< 0.05. FGS= Ferriman-Gallwey score HOMA-IR= homeostasis model assessment- insulin resistance FAI=Free androgen index

(IR+ and IR-). There was no statistically significant differences between the groups in terms of age, BMI (body mass index), systolic blood pressure, LH (luteinizing hormone), FSH (follicle-stimulating hormone), estradiol, HDL (high-density lipoprotein) cholesterol, LDL (low-density lipoprotein) cholesterol, TG (triglyceride), total cholesterol, SHBG, FAI, TT and DHEAS (dehydroepiandrosterone sulfate) levels. Comparison of group means showed significantly higher values for WHR (waist to hip ratio), diastolic blood pressure and FGS in the IR+ group.

Correlation analyses were performed between HOMA-IR and the other parameters in lean women with PCOS (Table II). HOMA-IR values were found to be positively correlated with WHR ($r=0.500$, $p<0.01$), systolic blood pressure ($r=0.265$, $p<0.01$), diastolic blood pressure ($r=0.273$, $p<0.01$), estradiol levels ($r=0.218$, $p<0.05$), FGS ($r=0.456$, $p<0.01$) and TT levels ($r=0.291$, $p<0.01$).

Conclusions: In conclusion, while evaluating PCOS subjects, insulin resistant group should be separated as a unique, for optimizing treatment modalities and reducing long term health risks. The importance of IR in lean subjects should be kept in mind and IR should be evaluated not only in obese PCOS subjects but also in the lean ones.

Keywords: Polycystic ovary syndrome, lean, insulin resistance

[OP-017]

The effects of IL-1A and IL-6 genes polymorphisms on gene expressions, hormonal and biochemical parameters in polycystic ovary syndrome

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Objective: Polycystic ovary syndrome (PCOS) is a multifactorial disease characterized by chronic inflammation. We aimed to investigate an association between IL-1A and IL-6 genes polymorphisms and both hormonal/biochemical parameters and levels of IL-1A and IL-6.

Material and Methods: A total of 103 women (76 patients, 27 controls) diagnosed with PCOS according to ESHRE/ASRM criteria were investigated. The patients were divided to two groups as obese and non-obese. IL-1A and IL-6 genes polymorphisms, as well as hormonal/biochemical parameters and levels of IL-1A and IL-6 were analyzed in the same groups.

Results: Serum IL-1A and IL-6 levels were found to increase both in obese and non-obese groups. However there was not an association between IL-1A level and IL-1A polymorphism. A relationship was detected between H score, FSH, LH, total testosterone, HDL-C and TG levels

and CG+GG genotypes of IL-6. Furthermore an association was found between IL-6 levels and CC genotype of IL-6 in the obese PCOS patients.

Conclusion: The abnormalities in hormonal/biochemical parameters detected in Turkish PCOS patients may be related with IL-6 gene polymorphism rather than IL-1A. IL-6 protein which increases owing to IL-6 polymorphism in obese patients may be the cause of the clinical and laboratory data seen in PCOS.

Keywords: Expression, Gene Polymorphisms, Interleukins, Polycystic ovary syndrome

[OP-018]

Are the endometrial polyps related with chronic disease, and additional gynecological pathologies?

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Objective: To evaluate the relationship of endometrial polip (EP) with DM, HT, obesity and other gynecological pathologies.

Material and Methods: A total of 138 patients with the pathology of EP between 2012-2014 years were studied. Age, gravida, parity, live births, endometrial thickness, longest dimension of polyps in the pathological examination, and additional uterine pathologies of the patients were recorded. Patients were divided into groups according to body mass index (BMI) and having chronic diseases or not (HT, DM or both).

Results: The mean age and BMI of patients were 48.53 ± 10.04 years and 28.3 ± 6.1 respectively. HT + DM comorbidity was more frequent in overweight patients than HT alone or DM alone. The incidence rates of endometritis, cervical polyps, adenomyosis were significantly higher in overweight group ($p<0.001$, $p = 0.017$, and $p = 0.014$, respectively). The BMI and polyp size of the patients in HT + DM group were statistically significantly higher when compared with the patients in the other groups ($p < 0.001$, $p < 0.001$ respectively). Cervicitis was seen at high rates in the disease-free group ($p = 0.026$). Endometritis, cervical polyps, and adenomyosis were more frequent in the group with HT + DM comorbidity ($p < 0.001$, $p < 0.001$, and $p < 0.001$, respectively).

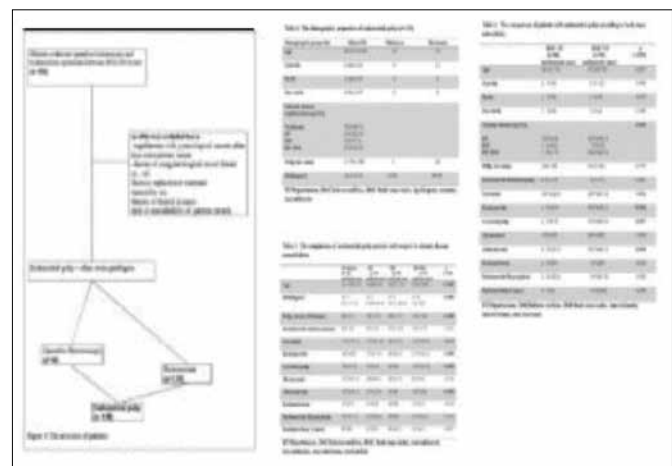


Figure 1.

Conclusion: EPs can be frequently seen in patients with overweight, DM, or HT. HT+DM comorbidity in overweight EP patients, in their later years may lead to high EP development in larger dimensions endometritis, cervical polyps, and adenomyosis.

Keywords: Endometrial polyps; diabetes mellitus; hypertension; obesity

[OP-020]

Challenging differential diagnosis of a primary stromal mass, causing ovarian torsion in a postmenopausal woman

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Primary ovarian leiomyomas are rare benign tumours of the ovary. They are mainly asymptomatic and discovered accidentally during imaging, operations for uterine leiomyoma, autopsies or other pathologies. We present a large torsionated primary ovarian leiomyoma in a 62-year-old postmenopausal patient whose symptoms began after the ovary was torsionated. The patient had nonspecific symptoms such as sudden onset of severe abdominal pain, nausea, vomiting and diarrhea. So that it was misdiagnosed as acute gastroenteritis. After the treatment the symptoms were reduced but intermittent abdominal pain was continued. In gynecological examination abdominal mass ranging from uterine fundus to umbilical level was revealed. In ultrasound examination approximately 8x6x13 cm lobulated, well-circumscribed mass with isoechoic myometrium and free fluid in the pelvic area were observed, the uterus was atrophic, ovaries couldn't be seen (subserosal leiomyoma?, tumor? were suspected). In MRI examination subserosal fibroid was considered (figure 1). In the laboratory, tumor markers were elevated CA-125: 214.2, CA-19-9: 59.81, CA-15-3: 26.05. Thus, malignant tumour or leiomyosarcoma were suspected in the patient. An explorative laparotomy was performed by vertical midline incision and we observed about 15x10 cm right ovarian mass that was 3-4 times torsionated with right adnex, well-circumscribed and necrotic. The mass was removed with right adnex without detorsionated, then total abdominal hysterectomy and left salpingo-oophorectomy with omental biopsy and peritoneal washings were performed. In pathological examination, the differential diagnosis from fibroma with immunohistochemical examination could not be performed due to edema and necrosis but it was interpreted as leiomyoma (figure 2). To our knowledge this is the third case of ovarian leiomyomas confused with malignancy and the first case of torsionated primary ovarian leiomyoma in postmenopausal period in the literature. The ovarian leiomyomas are rarely seen in postmenopausal patients so that it may not be suspected in differential diagnosis of pelvic masses. They should also be considered in the case of large pelvic masses isoechoic with myometrium, elevated tumour markers and intrapelvic ascites, in order to avoid unnecessary radical surgery.

Keywords: Leiomyoma, ovary, torsion, mimicking malignancy

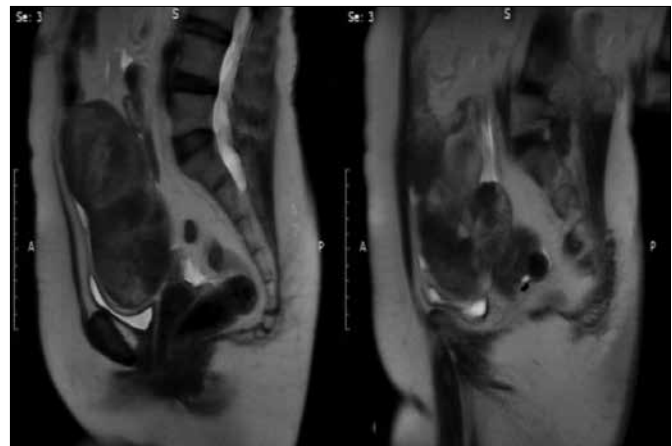


Figure 1. T2-weighted imaging in MRI, a: the mass was smooth, lobulated, 14x8 cm in size, demonstrated mixed-intensity signal on T2-weighted imaging and not hold contrast material, b: the uterus was atrophic, the pelvic mass was seen in the midline pelvic area and compressed on the anterior of uterus.

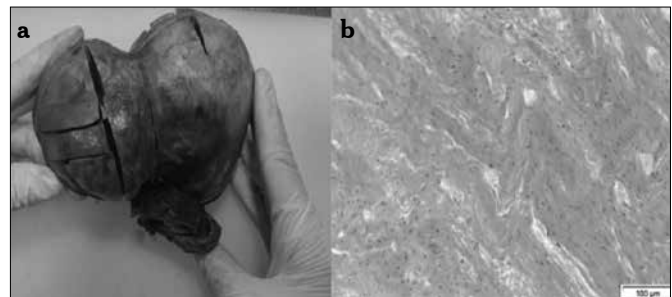


Figure 2. a, b. a: The macroscopic appearance smooth surface nodular lesion with the dimensions of 14 x 10 x 9 cm, consisting right fallopian tube, the right ovary could not be distinguished, cross sections of the solid lesion had commonly bleeding red-brown appearance, b: The microscopic results were diffuse coagulation necrosis and bleeding areas at cross sections with hyalinization of vessel walls. Cells of the lesion suffered necrosis and occurs from silhouette smooth muscle cells (H&E, 200X).

[OP-021]

Does postmenopausal osteoporosis have an impact on thiol-disulphide homeostasis?

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Objective: To evaluate impact of postmenopausal osteoporosis on thiol-disulphide homeostasis.

Material and Methods: A total of 75 participants were divided into two groups: Group 1 (n = 40) composed of healthy postmenopausal women and group 2 (n=35) was composed of women with postmenopausal osteoporosis. Clinical findings and thiol-disulphide homeostasis were compared in two groups.

Results: Disulphide/native thiol ratio was $8.6 \% \pm 3.6$ in the group 1 and $12.7 \% \pm 8.4$ in the group 2 ($p=0.04$). Disulphide/native thiol percent ratio was significantly higher in the group 2 after adjustment for the years since menopause and age ($p < 0.05$). Native thiol/total thiol percent ratio was $85.6 \% \pm 4.8$ in the group 1 and $73.8 \% \pm 24.9$ in the group 2 ($p=0.01$). Native thiol/total thiol percent ratio was significantly lower in the group 2 after adjustment for the years since menopause and age ($p < 0.05$).

Conclusion: Thiol-disulphide homeostasis shifted to disulphide side independent of age and years since menopause in postmenopausal osteoporosis.

Keywords: Disulphide, postmenopausal osteoporosis, thiol

[OP-022]

Evaluation of neutrophil-lymphocyte ratio, platelet-lymphocyte ratio, red cell distribution width-platelet ratio for the diagnosis of premature ovarian insufficiency

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Objective: It has been widely known that neutrophil to lymphocyte ratio(NLR), platelet to lymphocyte ratio(PLR) and red blood cell distribution width(RDW) to platelet ratio(RPR) reflect systemic inflammation. Current studies have failed to determine specific biomarkers of Premature ovarian failure(POF). We also have limited tools for the diagnosis of POF. Thus this study aims to evaluate whether inflammatory markers can be used as reliable markers for the diagnosis of POF and to determine if there is a relationship between these markers and FSH, Anti-Müllerian Hormone (AMH) levels.

Material and Methods: This study was a comparative study and carried out at Suleymaniye Maternity and Women's Disease Education and Research Hospital, In Vitro Fertilization clinic between January 2013 and February 2016. Written and electronic medical records were reviewed using searches for diagnoses with the terms of "premature ovarian failure", "premature ovarian insufficiency". 37 patients with POF(Group A) and 37 age-matched healthy females(Group B) were included. Patients younger than the age of 40 were diagnosed to have premature ovarian failure based on their menstrual history (at least a 4-month history of amenorrhea), gonadotropins levels (follicle stimulating hormone (FSH) levels ≥ 40 mIU per milliliter) and sonographic examination (no or a few demonstrable follicles on transvaginal ultrasound) were included in this study.

Secondary causes of amenorrhea including pregnancy, polycystic ovarian syndrome, chronic medical illness (uncontrolled diabetes mellitus or celiac disease), hypothalamic amenorrhea, extreme exercise, poor caloric intake, hyperprolactinemia, hyperthyroidism, hypothalamic or pituitary lesions, women with histories of chemotherapy, pelvic surgery, radiation exposure or premature ovarian failure due to extensive ovarian surgery were excluded. Medical conditions that may interfere with complete blood count parameters including hematologic, cardiovascular, kidney-liver disease, asthma, arthritis, neoplastic disease such as androgen-secreting tumours, ovarian tumour, use of glucocorticoids, infectious, parasitic or autoimmune diseases were also excluded.

Complete blood counts, day-3 hormone profiles, AMH levels of all subjects were analysed. NLR, PLR and RPR were calculated for both the patients and the control group. In statistical analysis, SPSS 17.0 for windows package program was used. Independent Samples T-test, Mann-Whitney U test, Pearson's Correlation and receiver operating characteristic(ROC) curves was used. p value of <0.05 was considered statistically significant.

Results: We found that NLR showed statistically significant difference between the patients and the control group, but the other parameters not. There were also statistically significant correlations between NLR and neutrophile, lymphocyte, FSH and AMH. According to regression analysis results, FSH and AMH levels are individually not predictors of NLR. ROC curve analysis results showed that NLR has prediction value for POF ($R^2=0.668$; $p<0.05$). For NLR cutoff at 1.53, sensitivity is 75.7% and specificity is 45.9%. For NLR cutoff at 1.33, sensitivity is 94.6% and specificity is 24.3%. For NLR cutoff at 2.43, sensitivity is 35.1% and specificity is 89.2%.

Conclusion: NLR has predictor value for the diagnosis of POF. Wider and multicenter studies are needed in this regard.

Keywords: inflammatory, marker, premature ovarian failure

[OP-025]

Clinical features and histopathologic outcomes of presumed benign adnexial masses in postmenopausal women

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Objective: The aim of the study was to estimate the histopathologic outcomes of postmenopausal adnexial masses which had been described as benign preoperatively.

Material and Methods: This retrospective study was conducted in our Gynaecology Clinic of Zekai Tahir Burak Hospital between January 2013-September 2015. A total of 119 women with postmenopausal adnexial masses, assumed as benign according to Risk of Malignancy Index- 2, were included. Age, duration of menopause, ultrasonographic characteristics, and serum CA-125 levels were recorded preoperatively. Final diagnosis was based on postoperative routine histopathologic examination.

Results: The mean age of patients was 55.4 ± 6.71 years. There were 119 postmenopausal women operated for adnexial masses in our gynaecology clinic during this period. Histopathological examination revealed that 8,4 % of the adnexial masses were malign

or borderline tumors while 91,6% were benign. Of these, 47 were simple cyst, 21 fibroma, 13 hydrosalpinx, 11 dermoid cyst, 8 mucinous cystadenoma, 4 borderline ovarian tumor, 3 endometrioma, 3 tubo-ovarian abscess, 3 adenocarcinoma, 3 serous cyst adenofibroma, 1 clear cell carcinoma, 1 leydig cell tumor, 1 stromal tumor. There was no statistically significant difference between benign and malign patients regarding age and tumor size. The only statistically significant ultrasonographic parameter between two groups was the presence of solid area in the mass. Moreover, If the cut off point for serum Ca-125 was adjusted to 14.75 IU/ml according to ROC curve, a sensitivity value of 80% and a specificity value of 72% could be achieved. (AUC 0,89).

Conclusion: In the differentiation of benign and malign adnexial masses in postmenopausal women, the presence of a solid component based on ultrasonography and high Ca 125 values may be used as discriminative criteria. It seems there is no direct relation between size of adnexial mass and malignancy potential. In the light of our data, decreasing the cut off point of Ca 125 levels in the malignancy indexes of postmenopausal women can be helpful for increasing the sensitivity of preoperative evaluation tests without having a great impact on negative predictive values.

Keywords: Adnexial Mass, Transvaginal Ultrasonography, Ca-125, Menopause, RMI

[OP-026]

Urologic complications of obstetrics and gynecological surgery

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Objective: Avoiding and managing urinary tract injuries during obstetric and gynecologic operations may lead to less frequent long term complications. In this study we retrospectively analyzed urological complications of our clinic since 2009.

Material and Methods: Forty-two patients with urological complications were found from January 2009 to February 2016.

Results: Forty-two patients (0.8%) with iatrogenic urinary tractus injury were found. Mean age of the patients were 46.5 (IQR:11.2), 26 (61.9%) of them undergone benign gynecologic surgery, 9(21.4%) gynecologic oncology surgery and 7 (16.7%) obstetrics surgery. Bladder injury was the most common urinary tract injury in both obstetric and gynecologic operation groups (0.03% & 0.07%). Women with bladder injury in caesarean section were all have had a prior caesarean delivery. Two women with caesarean hysterectomy had placenta accreta. Frequency of bladder injury is significantly higher in laparoscopic hysterectomy compared to open hysterectomy. No urinary injury was detected in robotic hysterectomy group although one of them was radical hysterectomy and three case with total hysterectomy plus sakrokolpopexia. Seven (63.6%) of 11 ureteral injuries and one blad-

der injury occurred inpatients undergone radical hysterectomy. Three ureteric injury occurred in hysterectomy and one in Burch operation. One patient was found with ureteral injury occurred in transobturator tape operation. Although 90% of bladder injuries diagnosed and repaired intraoperatively, 80% of iatrogenic ureteral injuries recognised postoperatively.

Conclusion: The most common urological trauma after pelvic surgery is bladder injury. Previous caesarean delivery and placenta accreta are the most common risk factor for bladder injury during caesarean delivery. Laparoscopic hysterectomy, radical hysterectomy and open urogynecologic operations are leading cause of ureteric injuries.

Keywords: Gynecologic surgical procedures, iatrogenic injuries, urological complications

Table 1. Type of surgery performed in patients with urological complications

Type of surgery	Total number of operation	Bladder (n, %)	Ureter (n, %)	Uretra (n, %)
C&S	16599	4(0.024)	0	0
CS-hysterectomy	19	2 (6.4)		
Radical hysterectomy	62	1 (1.61)	7 (11.2)	0
Hysterectomy	3164	18(0.56)	4(0.09)	0
Abdominal	2953	10(3.38)	1(0.03)	0
Vaginal	21	0	1(4.76)	0
LS/robotic	181/9	8/0(4.4/0)	1(0.55/0)	0/0
Burch-open	1146	1(0.08)	1(0.08)	0
Burch-LS	14	2(14.2)	0	0
TOT	332	0	0	1 (0.30)
Tubal surgery	3630	2(0.055)	0	0
Total gynecology	33314	24(0.07)	11(0.033)	1(0.003)
Total group	49932	30(0.06)	11(0.022)	1(0.002)

[OP-027]

Serum anti-Müllerian hormone levels in euthyroid adolescent girls with Hashimoto's thyroiditis: relationship to antioxidant status

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Objective: Free radical-mediated oxidative stress has been implicated in the etiopathogenesis of Hashimoto's thyroiditis (HT), which is the most common thyroid disorder in adolescents. HT requires lifelong thyroid surveillance, particularly in women of childbearing age to avoid adverse effects on reproductive function. The aims of this study were to investigate serum concentrations of anti-Müllerian hormone (AMH), a marker of ovarian reserve, in euthyroid adolescent girls with newly diagnosed HT and explore the relationships between AMH levels and biomarkers of antioxidant status.

Study design: We recruited 57 non-obese (body mass index [BMI] Z-score < 2) adolescent girls with newly diagnosed HT and 50 age- and BMI-matched healthy controls for this case-control study. All participants were euthyroid. Hormonal and metabolic parameters, serum levels of AMH, and antioxidant status [paraoxonase (PON) and arylesterase (ARE) activities] were assessed.

Results: Serum AMH levels were significantly higher and serum PON and ARE activities were significantly lower in adolescents with HT than in the controls ($p < 0.001$ for all). No significant associations were detected between the AMH level and any of the clinical or biochemical parameters in the control group. Serum AMH levels were negatively correlated with PON ($r = -0.435$, $p = 0.001$) and ARE ($r = -0.422$, $p = 0.001$) activities in adolescents with HT.

Conclusion: The AMH level was inversely correlated with antioxidant enzyme activities in euthyroid adolescent girls with newly diagnosed HT.

Keywords: Anti-Müllerian hormone, adolescent, antioxidant status, Hashimoto's thyroiditis, ovarian reserve

[OP-028]

Guess who pays the bill? Of course the most innocent

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Background: Millions of Syrian refugee people migrate to Turkey and other parts of Europe due to violation against their human rights.

Aim: This study was to describe our experience with refugee Syrian women in an Education and Research Hospital located in Ankara, the capital city of Turkey.

Material and Methods: The electronic database of Etlik Zubeyde Hanım Education and Research Hospital was searched for the terms "Syrian Refugee" and "stateless refugees". The list of patients between January 1, 2015 and December 31, 2015 was analyzed for age groups, inpatient and outpatient visits, and distribution of patients among services.

Results: A total of 6438 Syrian refugee people were followed in the study period: 4492 patients in outpatient visits and 1946 patients were hospitalized. Among them, 1598 patients (24.8%) were at 0 – 1 years of age: 1390 babies (31%) in the outpatient visits and 208 babies (10.7%) were hospitalized. In the hospitalized adult patient group, the high risk pregnancies formed the majority with 524 patients.

Conclusion: Displacement of a population is hard for adults, but even harder for newborns and toddlers.

Keywords: Displaced populations, refugee, refugee children

[OP-031]

Cystatin C, a promising metabolic risk marker in women with polycystic ovary syndrome

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Objective: This study was performed to assess the impact of cystatin C on the metabolic components of PCOS (polycystic ovary syndrome).

Material and Methods: Retrospective analysis of a prospectively collected data of 75 PCOS subjects, who attended to Marmara University Hospital was performed. The diagnosis of PCOS was made according to the 2003-Rotterdam criteria. Insulin resistance, defined by HOMA-IR (homeostasis model assessment insulin resistance index), was calculated using the following equation: $\text{HOMA-IR} = \text{fasting insulin } (\mu\text{U/L}) \times \text{fasting glucose } (\text{mmol/L}) / 22.5$. The mean value of cystatin C (0.71 mg/L) for

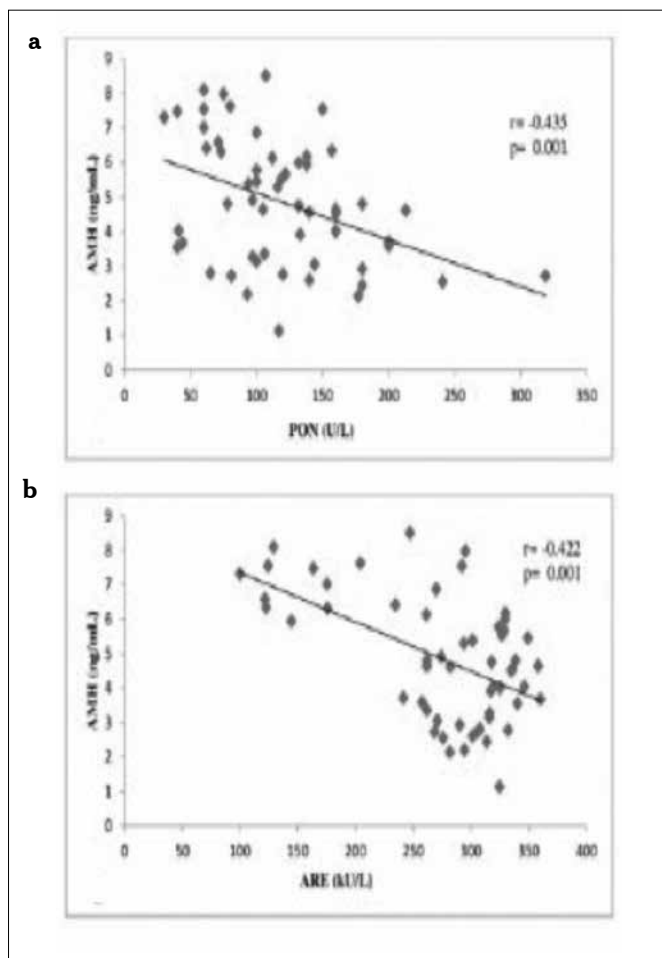


Figure 1. Negative correlation between serum AMH levels and (a) PON and (b) ARE activities in adolescents with HT

Table 1. Clinical and metabolic characteristics of groups

	Group 1 Cystatin C ≥0.71 mg/L n=34	Group 2 Cystatin C < 0.71 mg/L n=41	p
Age (y)	24.5±4.24	23.80±4.17	0.479
WHR	0.80±0.03	0.76±0.04	<.001b
BMI(kg/m ²)	25.62±2.37	24.40±2.46	0.033a
FSH(mIU/ mL)	5.17±1.25	5.50±1.46	0.306
LH (mIU/ mL)	9.74±5.15	10.52±4.94	0.506
E2(pg/ dL)	34.71±11.36	36.85±11.23	0.743
Systolic blood pressure (mmHg)	116.26±9.87	112.36±11.37	0.121
Diastolic blood pressure (mmHg)	68.82±7.77	67.60±6.97	0.479
HDL cholesterol (mg/ dL)	47.08±11.74	53.82±15.01	0.036a
LDL cholesterol (mg/ dL)	116.80±32.06	96.44±22.66	0.002b
Triglyceride (mg/ dL)	136.97±49.40	89.55±28.61	<.001b
Total cholesterol(mg/ dL)	192.41±33.68	168.70±25.97	0.001b
BUN(mg/ dL)	10.14±2.90	9.96±1.86	0.171
Serum creatinine(mg/ dL)	0.72±0.17	0.71±0.16	0.909
Uric acid(mg/ dL)	4.13±0.59	4.33±0.55	0.410
HOMA-IR	2.40±1.18	2.48±1.20	0.773
Metabolic Syndrome	18 (53)	0(0)	<.001b

Note: Values are expressed as Mean±SD or N (%). HOMA-IR= homeostasis model assessment- insulin resistance a P<.05. b P<.01.

women in general population which is determined by nephelometric method was taken as the cutoff value. Seventy five PCOS subjects were divided into two groups according to the cystatin C cutoff value as group 1 (cystatin C ≥0.71 mg/L) and group 2 (cystatin C <0.71 mg/L). Clinical and metabolic parameters were compared between the two groups. All data were analyzed using SPSS (Statistical Package for Social Sciences) for Windows, Version 22 (IBM Corp, Armonk, NY). The results were considered significant if P values were <0.05; highly significant if p<0.01. Continuous variables are presented as mean±SD and categorical variables as numbers and percentages. For the analysis of qualitative data, chi-square test was used. For the analysis of quantitative data, Student's t-test or Mann-Whitney U-test was used, as appropriate.

Results: Seventy five women with PCOS were enrolled in the study, of which 18 subjects (24% of all PCOS subjects) were diagnosed with metabolic syndrome. Metabolic syndrome was found in 18 (53%) of the subjects in group 1 and was found in none of the subjects in group 2 (p<.001). There was no statistically significant differences between the groups in terms of age, FSH (follicle-stimulating hormone), LH (luteinizing hormone), estradiol, systolic and diastolic blood pressure, BUN (blood urea nitrogen), serum creatinine, uric acid and HOMA-IR (Table 1). Comparison of group means showed significantly higher values for WHR (waist to hip ratio), BMI (body mass index), LDL (low-density lipoprotein) cholesterol, TG (triglyceride), total cholesterol and lower values for HDL (high-density lipoprotein) cholesterol in group 1 (cystatin C ≥0.71 mg/L) compared to group 2 (cystatin C <0.71 mg/L) (Table 1).

Conclusion: Since PCOS is a multifaceted syndrome with long term metabolic and cardiovascular risks, while evaluating women with PCOS, cystatin C may be a practical and promising metabolic risk marker. Considering the importance of early preventive strategies, cystatin C may be helpful for the determination of target subjects at

high risk; however, larger studies are needed for the routine use of this new marker in clinical practice.

Keywords: Cystatin C, metabolic syndrome, polycystic ovary syndrome

[OP-032]

Manual separation with and without betamethasone and estrogen creams in the treatment of prepubertal labial adhesions

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Objective: To evaluate the efficacy of manual separation (MS) alone and MS plus topical estrogen (TE) or topical betamethasone (TB) for the treatment of prepubertal labial adhesions (LA).

Material and Methods: In this retrospective study, we accessed the records of patients presenting to Obstetrics and Gynecology clinic in a tertiary care center from July 2013 to March 2016 and treated with manual separation (MS) alone or combined with medical therapy for LA. A course of treatment consisted application of cream twice a day for 4 weeks. The patients whose parents were not willing to the conservative treatment as a first line option underwent manual separation ± topical treatments. All patients underwent MS at the office after application of lidocain spray. Patients in one of the groups received no topical treatments after MS. Other two groups were prescribed either a course of betamethasone cream (TB) or estrogen cream (TE) after MS and par-

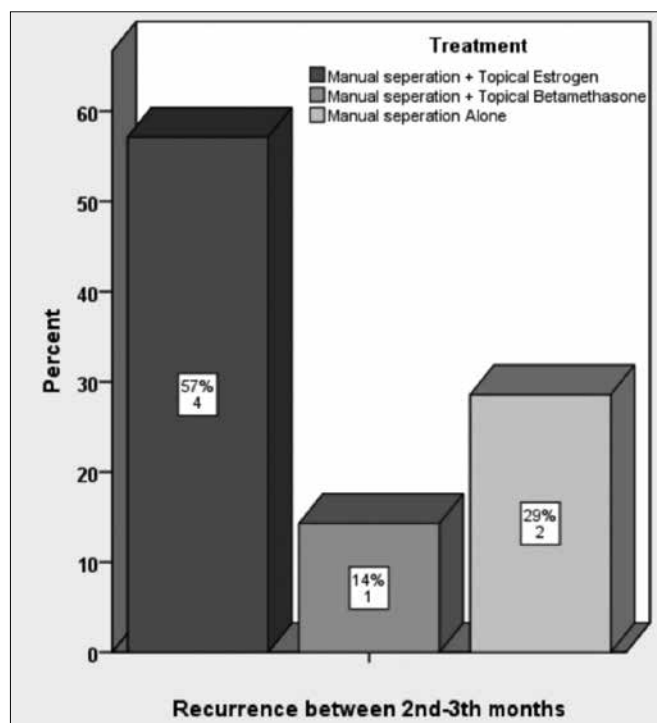


Figure 1. Recurrence of labial adhesions between 2nd and 3rd months of treatment

Table 1. Distributions of variables according to treatments

Treatments		Manual separation + Topical Estrogen n(%)	Manual separation + Topical Betamethasone n(%)	Manual separation Alone n(%)	p
Symptom	Dysuria	2(20)	3(30)	2(20)	0.889
	Urinary infections	5(50)	2(20)	4(40)	
	Vulvovaginitis	2(20)	3(30)	3(30)	
	Post-void Dripping	1(10)	2(20)	1(10)	
Recurrence at 1 st month	No	10(100)	10(100)	8(80)	0.117
	Yes	0(0)	0(0)	2(20)	
Recurrence between 2 nd -3 rd months	No	6(60)	9(90)	8(80)	0.271
	Yes	4(40)	1(10)	2(20)	
Side effects	Erythema	1(10)	1(10)	0(0)	-
	Pruritus	0(0)	1(10)	0(0)	
	Skin atrophy	0(0)	0(0)	0(0)	
	Vesiculation	0(0)	0(0)	0(0)	
	Breast budding	0(0)	0(0)	0(0)	
	Vaginal bleeding	0(0)	0(0)	0(0)	
	None	9(90)	8(80)	10(100)	

ents were instructed to apply it to the labia minora twice daily for one month. Four weeks and 12 weeks after treatment initiation patients were reassessed. Having no residual adhesions was considered successful. Data were collected on the incidence of related symptoms, side effects of medical therapies, rate of successful separation, rate of recurrence. Data are shown as mean, standard deviation or frequency, percentage. Independent sample t test or one way analysis of variance were used to compare the continuous normal data between/among groups. For post-hoc comparisons between the pair-wise groups, the Tukey HSD test was used. Chi-Square test was used to compare the categorical data between/among groups. A p-value <0.05 was considered significant.

Results: Mean age of the patients was 29.53 months. The most common presenting symptom was urinary tract infections (36.7%) followed by vulvovaginitis (26.7%), dysuria (23.3) and post-void dripping (13.3%) (Table 1). None of the patients in topical agent prophylaxis groups had recurrence at the end of 4 weeks of application. However, 2 patients who were treated with MS alone had recurrence of labial adhesions at the first month visit and treated again with MS alone and followed. At the 3rd month reevaluation, 2 patients in MS group, 1 patient in MS+TB group and 4 patients in MS+TE group had recurrence of LA (Figure 1). No serious side effects were seen; eythema in 1 patient in each of the topical prophylaxis groups and pruritus in 1 patient in TB group, both of which were tolerated well, unnecessiating cessation of therapy.

Conclusion: While conventional post-treatment follow up involves continued application of estrogen cream with improved hygiene, application of topical 0.05 % betamethasone valerate cream produced less recurrence following manual separation and seems promising in the treatment of LA.

Keywords: Labial adhesion, manual separation, estrogen, betamethasone

[OP-034]

Bilateral paratubal cysts in an adolescent

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Introduction: Paratubal or paraovarian cysts represent approximately 10% of all adnexal masses (1). They rarely become symptomatic in adolescents (2). Preoperative diagnosis is often difficult and diagnosis is usually made at surgery. We report a rare presentation of an acute abdomen in an adolescent with bilateral paratubal cysts.

Case Presentation: A twenty year old virgin girl presented to the emergency department with two days history of abdominal pain and nausea. This was the first episode of such pain. She had regular menstruations at intervals of 26–28 days, lasted for 6–7 days, associated with mild dysmenorrhea.

On presentation her lower abdomen was full with tenderness in the right and left iliac fossa and hypogastrium. Preoperative investigations, including the renal function tests and the serologic oncological markers were normal. Inflammatory markers showed normal C-Reactive Protein (1,56 mg/ml) and a total white cell count of $6 \times 10^3/\mu\text{L}$ (range 4- 10.3). Suprapubic ultrasound showed a normal uterus; right ovary presented a mass of 6 cm in diameter in right ovarian region and left ovary showed normal parenchyma with a mass of 4 cm in diameter. The woman underwent laparoscopy; abdominal cavity and uterus were normal, the right and left ovaries presented two masses suspicious for dermoid cysts, respectively (figure 1,2). The cysts were excised, preserving the fallopian tubes. The patient had an uncomplicated postoperative recovery and was discharged two day from laparoscopy. Definitive pathologic examination confirmed the diagnosis of bilateral paramesonephric cysts.

Discussion: In the paratubal and paraovarian regions the majority of the cysts are of Mullerian origin and can account for up to 76% of all the cysts (2). They are more common in adults and only occur rarely



Figure 1. Bilateral paratubal cysts in adolescent figure 1



Figure 2. Bilateral paratubal cysts in adolescent figure 2

in adolescents (4%) (2). A neoplastic potential has been identified (3) with the incidence varying from 1.69% to 2 %. Hence excision should be seriously considered (3).

Accurate preoperative diagnosis can be difficult. Ultrasound has been used as the first line for diagnosis. MRI may give more detailed three dimensional information but essentially features are the same as an ultrasound. Laparoscopy has been used successfully in adolescent practice to deal with large or complicated paraovarian cysts (4). The indication for open surgery is malignancy or suspicion of malignancy, dense adhesions or large cysts (4). In summary we report a very rare case of bilateral paratubal cysts which were identified and excised during laparoscopy for an acute abdomen in an adolescent girl.

Keywords: Adolescent, laparoscopy, paratubal cyst

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[OP-035]

Carotid artery intima media thickness (CIMT) is statistically significantly increased in young PCOS patients - reflection of an increased cardiovascular disease risk at the very beginning of life

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Objective: The United Nations defines 'youth' as those between the ages of 15 and 24 years. A recent meta-analysis showed a two-fold relative risk of coronary heart disease in PCOS (polycystic ovary syndrome). Studies found that women with PCOS had more severe sub-clinical atherosclerosis as measured by CAC (coronary calcification scores), CIMT (carotid artery intima-media thickness) and endothelial dysfunction compared with controls. The objective of this study is to determine if CIMT along with other cardiovascular risk factors as dyslipidemia and hyperhomocysteinemia differs in young PCOS subjects when compared to those of healthy youth.

Material and Methods: A retrospective analysis of a prospectively collected data is performed where 57 women younger than 24 years of age, diagnosed to have PCOS according to the 2003 Rotterdam criteria and 51 age-matched healthy controls were enrolled. The presence and the extent of hirsutism were assessed by FGS (Ferriman-Gallwey score). Serum FSH (follicle-stimulating hormone), LH (luteinizing hormone), E2 (estradiol), DHEAS (dehydroepiandrosterone-sulfate), total T (testosterone), insulin, fasting plasma glucose, triglyceride, homocysteine and total, HDL (high-density lipoprotein) and LDL (low-density lipoprotein) cholesterol levels were measured and CIMT of both carotid arteries was measured by the same experienced radiologist who was blinded to the clinical and biochemical data. FAI (free androgen index) and insulin resistance as defined by HOMA-IR (homeostasis model assessment insulin resistance index) were calculated. Statistical analysis was performed by using SPSS (Statistical Packages for the Social Sciences) 18.0 (SPSS Inc., Chicago, IL, USA). Data are presented as mean and standard deviation, comparisons in quantitative parameters between the PCOS and control groups were performed by unpaired t-test and a p value of <0.05 was considered to be significant.

Results: There was no statistically significant difference between the groups when age, BMI, HOMA-IR, total cholesterol and triglyceride levels were compared. However, homocysteine and LDL levels were statistically significantly higher and HDL level was lower in the PCOS group. Moreover, right, left and mean CIMT values were all higher in the PCOS group

Table 1. Baseline characteristics and hormone profiles of subjects

	PCOS (n=57)	Control (n=51)	p value
Age (y)	21.07±2.39	21.47±1.54	0.31
BMI	25.82±3.78	24.77±3.93	0.16
FGS	17.32±5.52	3.92±0.98	<0.001**
Total T (nmol/L)	1.66±0.82	0.92±0.46	<0.001**
SHBG (nmol/L)	79.72±60.93	69.54±33.88	0.29
FAI	3.4±3.06	1.67±1.34	<0.001**
DHEAS (µg/dL)	309,23±114.42	234.6±97.2	<0.001**

Values are mean ± standart deviation (SD); BMI:body mass index; FGS: Ferriman-Gallwey score; PCOS: polycystic ovary syndrome; DHEAS: dehydroepiandrosterone sulfate; T: testosterone; SHBG: Sex hormone binding globulin; FAI: free androgen index * Statistically significant (p<0.05) ** Statistically highly significant (p<0.01)

Table 2. Metabolic, biochemical profile, cardiovascular risk factors and CIMT measurements in women with PCOS and control group

	PCOS (n=57)	Control (n=51)	p value
Homocysteine ($\mu\text{mol/L}$)	10.23 \pm 2.04	7.82 \pm 2	<0.001**
Total cholesterol (mg/ dL)	195.53 \pm 33.88	193.35 \pm 38.11	0.75
HDL cholesterol (mg/ dL)	53.97 \pm 13.59	62.37 \pm 18.95	0.009**
LDL cholesterol (mg/ dL)	96.71 \pm 24.81	79.89 \pm 15.77	<0.001**
Triglyceride (mg/ dL)	125.42 \pm 32.31	115.31 \pm 31.09	0.10
HOMA-IR	3.24 \pm 2.3	2.77 \pm 2.44	0.31
Right CIMT (mm)	0.51 \pm 0.11	0.43 \pm 0.07	<0.001**
Left CIMT (mm)	0.50 \pm 0.12	0.42 \pm 0.07	<0.001**
Mean CIMT (mm)	0.51 \pm 0.11	0.43 \pm 0.07	<0.001**

Values are mean \pm standart deviation (SD); PCOS: polycystic ovary syndrome; CIMT: carotid artery intima media thickness; HOMA-IR: homeostasis model assessment insulin resistance index; HDL: high-density lipoprotein; LDL: low-density lipoprotein *Statistically significant ($p<0.05$) **Statistically highly significant ($p<0.01$)

and the difference was statistically highly significant (Tables 1 and 2).

Conclusion: Although it is accepted that the metabolic dysfunction in women with PCOS leads to increased risk for CVD (cardiovascular disease), exactly when the risk factors leading to this increased risk starts to differentiate between PCOS and healthy subjects is yet to be determined. In this study, the results show a lower HDL and higher LDL and homocysteine levels in young PCOS subjects which reflects a more atherogenic state. Moreover, CIMT, which is a well-established index of atherosclerosis and which is strongly associated with increased risk of cardiovascular events, is statistically highly significantly increased in this young PCOS group. BMI and HOMA-IR were not a factor in this increased CVD risk in our study as there was no difference between the groups. Therefore, it can be concluded that the CVD risk is increased in all women with PCOS starting at very early years of their reproductive life and that they should all be counseled for this increased risk from youth onward.

Keywords: Cardiovascular disease, Carotid artery intima media thickness, polycystic ovary syndrome

[OP-037]

Recurrent pregnancy loss is associated with increased serum growth differentiation factor 15 and C-reactive protein

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Objective: The relation between endothelial dysfunction and recurrent miscarriage (RM) has been verified. Growth differentiation factor 15 (GDF-15) has been documented as a potential marker of inflammation and endothelial damage. C-reactive protein (CRP) is a marker of systemic and chronic inflammation. The aim of this study was to evaluate endothelial function and inflammatory alterations by measuring plasma CRP and GDF-15 levels in women with unexplained RM and compare them with healthy non-pregnant.

Material and Methods: This study was conducted prospectively and performed on 45 patients with unexplained RM and compared to 45 healthy controls. The control group consisted of age and body mass index (BMI) matched women with a history of at least one live delivery and without a history of miscarriage, intrauterine growth restriction, stillbirth and preeclampsia. The RM group was analyzed for autoimmune, genetic, anatomic, endocrine, thrombotic and infectious causes ruled out in all participants in our study. These two groups were compared in terms of GDF-15 and CRP.

Results: The mean GDF-15 level at presentation was 720 \pm 131 pg/ml among healthy parous and was 900 \pm 240 pg/ml among women with unexplained RM. The mean levels of GDF-15 were found to be significantly higher in patients with RM than control groups ($p<0.001$). CRP levels were 3.93 \pm 5.57 mg/L and 1.75 \pm 1.89 mg/L in the RM and control groups, respectively ($p<0.05$).

Conclusion: Our study detected statistically and significantly higher CRP and GDF-15 levels in subjects with unexplained RM compared to healthy control groups. Increment in serum GDF-15 levels could be connected with endothelial dysfunction produced by systemic inflammatory processes in women with RM.

Keywords: Recurrent pregnancy loss, GDF-15, CRP

[OP-038]

Pregnancy, fibromyalgia syndrome and serotonin

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Fibromyalgia syndrome (FS) is characterised by widespread pain and increased sensitivity to pain in the central nervous system. Physical and psychological symptoms accompany the disease. The most common accompanying conditions are manual tender points, sleep disorders, fatigue, stiffness, anxiety and depressive symptoms; however, the etiology has not yet been clarified. FS is seen mainly in women between the ages of 25-55. Even though this is a condition that affects women of reproductive age, until now the relationship between pregnancy and FS has not been the subject of many studies. The study is a prospective case-control study conducted with patients at the birth

unit of Department of Obstetrics in the period between January and June 2015. 277 pregnant women were included in this study. In the study, fibromyalgia syndrome was determined based on the presence or absence of the 2010 ACR diagnostic criteria. Our study included 150 pregnant women who had fibromyalgia syndrome, classified according to these criteria. The control group include 127 pregnant women who did not have fibromyalgia syndrome. The impact of the presence of fibromyalgia on the functional status of the patients in their daily life was evaluated using the FIQ (Fibromyalgia Impact Questionnaire). VAS (Visual Analog Scale) is used to assess the severity of pain; BDI (Beck Depression Inventory) is used for assessing depression. This study included 150 pregnant women who had fibromyalgia syndrome and 127 pregnant women who did not FS. There was no demographic differences between the groups. When the difference between FS group and the control group in terms of these queries is studied as a single variable, its has been shown statistically that in the presence of FMS, the physical and psychological scores are negatively affected ($p < 0.001$). No correlation between the marital satisfaction form results of the questionnaire and the presence of FS ($p = 0.634$). In the study, the group with fibromyalgia syndrome and the control group were compared in terms of biochemical and hormonal parameters. The results of this comparison are as follows: There was no significant difference between the groups in terms of glucose, calcium, phosphorus, PTH, TSH, fT4 levels. Comparison of the results from the fibromyalgia syndrome group and control group showed that the serotonin levels in the fibromyalgia syndrome group were significantly lower than the level of serotonin in the control group ($p = 0.009$). The correlation between the Beck Depression Inventory scores and other parameters showed that pain and physical impact scores are negatively affected by depression ($P = 0.000$). A one-unit increase in the BDI score increases the risk of FS 1.22 fold, which was statistically significant. A 1-unit decrease in the amount of serotonin increases the risk of the FS 1.003 times. But this correlation was not statistically significant. In conclusion, our study has shown that serotonin levels in women with FMS are lower than the control group and that serotonin levels reduce as pregnancy progresses. Anxiety and depression in pregnant women with FS are higher than the control group. The presence of depression increases the likelihood of developing FS.

Keywords: Pregnancy, serotonin, fibromyalgia

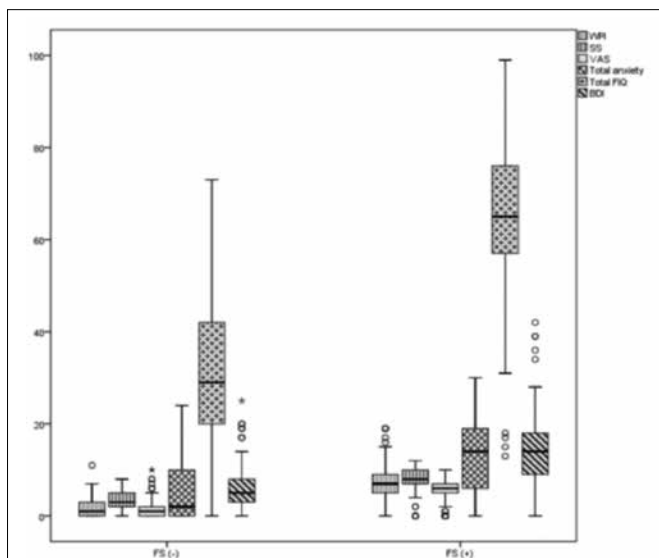


Figure 1. Changes in physical and psychological effects in FS (-) and FS (+) groups in WPI, SS, VAS total anxiety, total FIQ and BDI queries

[OP-040]

Examination of effects on uterine and ovarian volumes of intrauterine system containing levonorgestrel

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Objective: This article aimed to examined the effect of ovarian and uterine volume in premenopausal patients who applied to intrauterine device with Levonorgestrel due to heavy menstrual bleeding

Material and Methods: In this study, 117 premenopausal patients with heavy menstrual bleeding who admitted to Mustafa Kemal University Faculty of Medicine Gynecology Clinic were included. 91 patients completed the 1-year follow-up. Their ages ranged from 23 to 49, mean age is 39.54 ± 6.4 . Uterus and ovaries were considered to be ellipsoidal organs. $V = d1 \times d2 \times d3 \times 0.52$ formula was used for both organs in the volume calculation using three wide (D1: transverse diameter, D2: anteroposterior diameter D3 Longitudinal diameter). When calculating the uterine volume, it was measured to not get into the cervix. The pretreatment and posttreatment 12th months of uterine and ovarian volume were measured and recorded.

Results: A slight decrease in uterine volume after treatment compared to before treatment, although this difference was not statistically significant (Pretreatment uterine volume: $65 \pm 12,28 \text{ cm}^3$, after treatment of uterine volume: $62.99 \pm 11,89 \text{ cm}^3$ $p > 0.05$) (See Table 11 and Figure 25). After treatment compared to before treatment, the right and left ovarian volume was not statistically significant difference ($p > 0.05$). In addition, between the right and left ovaries of their volume measurements before treatment and after treatment did not reveal statistically significant difference (Pre-treatment right ovarian volume: $23.83 \pm 4,32 \text{ cm}^3$, after treatment right ovarian volume: $23.42 \pm 4,47 \text{ cm}^3$ $p > 0.05$, pre-treatment left ovarian volume: $23,36 \text{ cm}^3$, after treatment left ovarian volume: $23.00 \pm 4,39 \text{ cm}^3$ $p > 0.05$).

Discussion: Mirena is a good alternative to hysterectomy in woman who have excessive menstrual bleeding. In the literature, many studies have found that Mirena is an alternative to hysterectomy is a minimally invasive method. When they examine 33 cases for 1 year, they found decreased uterine volume. Although we detect a slight reduction in uterine volume in our study, this difference was not statistically significant. There are many studies in the literature about that LNG-IUD has no effect to uterine and uterine volume reduction and change. Some researchers have suggested that LNG-IUD prevent bleeding by reducing uterine volume. In a series of 67 cases, they reported that Mirena decrease in both the volume of uterine and fibroids. In a prospective multicenter randomized study for 7-year, they reported that LNG-IUD didn't demonstrate a change for uterine volume and fibroids volume.

Conclusion: LNG-IUD is a highly efficient and reliable technique for heavy menstrual bleeding. Its effect of the uterine volume is contro-

versial. In our study, there were no significant changes in the uterine and ovarian volume for 1-year. Our long-term volume study continues.

Keywords: LNG-IUD, uterine volume, ovarian volume

[OP-041]

A rare-type of endometriosis: abdominal wall endometriosis

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Objective: In endometriosis, functional endometrial gland and stroma locate uterus cavity; a displacement from inside to outside. Even though it is common for all organs, it is most common for pelvis, which can result in dysmenorrhea, dyspareunia, chronic pelvic pain and infertility. Surgery is common for abdominal wall endometriosis which is easily diagnosed. Cyclic abdominal pain during menstrual-period and mass that is recognized by hand is helpful for the diagnose. Its discriminatory diagnosis from suture granuloma, incisional hernia, and primer and/or metastatic cancer must be performed.

Case: A 42-year old patient (gravity 5 and parity 5), who underwent three caesareans among which the last one was 5 years ago, reported abdominal severe pain during menstrual-period. Gynecological examination and pelvic ultrasonography were normal for the patient. A solid heterogeneous 22X17 mm solid lesion was observed in surface ultrasonography of abdominal anterior wall (Image 1). The patient underwent surgery with pre-diagnosis of endometriosis based on her caesarean history and the cyclic pain in the region. Skin was opened with left pararectal incision, and 2-cm mass fixed to rectus fascia was observed (Image 2). The mass was cut with the surrounding tissue, and pathological results revealed endometriosis locating in fibromuscular-musculo-adipose tissues. The patient was discharged from the



Figure 1. Ultrasound image of the abdominal wall endometriosis



Figure 2. Intraoperative image of abdominal wall endometriosis

hospital one day after the surgery.

Result: Despite the fact that abdominal wall endometriosis has the lowest incidence among the external endometriosis; it is the easiest diagnosed type. Cyclic pain and the mass recognized by hand are the two most prominent symptoms. Relatively slight surgery can overcome this problem.

Keywords: Endometriosis, chronic pelvic pain, caesarean

[OP-043]

Five years data about refugee services of Turkey's biggest government woman hospital

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Objective: The chaotic situation in Syria, Iraq, Horn of Africa and the Sub-Saharan region continue to fuel refugee movements. Through 2015 both inflows surged and the routes used by asylum seekers from Syria, Iraq and Afghanistan, Pakistan and Africa changed to the “Eastern Mediterranean and Western Balkan route”. Turkey is the most affected country in the OECD, currently hosting as many as 3 million Syrians as well as a large number of people from Iraq mostly under temporary protection status. In this poster, we present the 5 year data of Dr Zekai Tahir Burak Women’s Health Training and Research

Table 1. WHO Defined Basic Principles of Public Health Strategies for Migrants

Avoid disparities in health status and access to health services between migrants and the host population.
Ensure migrants’ health rights which entails limiting discrimination or stigmatization, and removing impediments to migrants’ access to preventive and curative interventions, that are the basic health entitlements of the host population.
Put in place life-saving interventions so as to reduce excess mortality and morbidity.
Minimize the negative impact of the migration process on migrants’ health outcomes.

Table 2. Hospital Data of Reugees

Years	Total number of patients applied to outpatient clinic	Total number of refugees applied to outpatient clinic	Total number of hospitalised refugees	Total number of births	Total number of refugees giving birth
2015	236762	12894 (5.4%)	877	17704	836 (4.7%)
Syria		6271 (2.6%)			
Iraq		3275 (1.3%)			
Other		3348 (1.4%)			
2014	277539	5616 (2.02%)	1087	18429	
Syria		2437 (0.87%)			
Iraq		333 (0.11%)			
Other		2846 (1.02%)			
2013	324390	2509 (0.77%)	402	17917	
Syria		50 (0.01%)			
Iraq		6 (0.001%)			
Other		2453 (0.75%)			
2012	299543	1847 (0.61%)	292	17690	
Syria		15 (0.005%)			
Iraq		25 (0.008%)			
Other		1807 (0.6%)			
2011	239414	1447 (0.6%)	209	18215	
Syria		7 (0.002%)			
Iraq		14 (0.005%)			
Other		1426 (0.59%)			
Other;Afghanistan Pakistan, Africa,Ukraine					

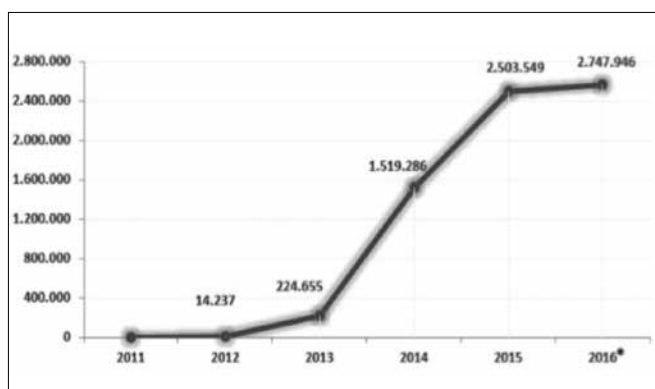


Figure 1. Number of temporary protection identity card given refugees according to years

Hospital (Ankara) about the immigrant patients since the eruption of Syrian civil war in 2011.

Material and Methods: From Immigration Office and from our Hospital records, we reached the number of refugees has been given temporary protection identity cards and treated in our hospital since the start of Syrian civil war in 2011.

Results: Disaster coordination center of the Turkish Primary Ministry has been developing the immigration policies of Turkey. Immigration Offices under Turkish Ministry of Interior Affairs in coordination with Ministry of Health and Ministry of Family and Social Policies deals with the immigrant problems in parallel with World Health Organisation (WHO) suggestions (Table 1). Most of the immigrants were given temporary protection identity cards that they could reach the social services of Turkish Government including the health insurance services without payment. (Figure 1) Our hospital datas are given in (Table 2).

Conclusion: The refugee number increased nearly 3 million in 2016 and the Turkish Government free services especially in health, reached to huge numbers. Migrant healthcare projects need more research and eventually international best practices.

Keywords: Refugee, women, health

[OP-045]

ADAMTS-3, -13, -16, and -19 levels in patients with habitual abortion

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Objective: A Disintegrin-like and Metalloproteinase with Thrombospondin type-1 motif (ADAMTS) proteinases, which are released outside the cell, have critical roles in extracellular matrix (ECM) remodeling and has 19 family members. These enzymes have very critical roles in the physiology of the female reproductive system including gonadal development, ovulation, implantation, angiogenesis and steroidogenesis. The aim of this study was to investigate ADAMTS 3, 13, 16 and 19 levels in patients with habitual abortion.

Material and Methods: The study group was selected from a population of non-smoking women with 3 or more abortion who applied to infertility outpatient clinic at Zekai Tahir Burak Women's Health Research and Education Hospital, Ankara, Turkey, between February 2015 and January 2016. Patients with additional diseases (antiphospholipid syndrome, diabetes, thyroid diseases) and who have genetic translocations were excluded from the study. A total of 86 women (45 patients with habitual abortion and 41 healthy women) were enrolled in this prospective case-control study. Serum ADAMTS 3, 13, 16 and 19 values were measured by commercially available Enzyme-Linked Immunosorbent Assay (ELISA) kit (HANGZHOU EASTBIOPHARM CO., LTD., China). The local ethical committee approved the study and written informed consent was taken from all of the patients. Statistical comparisons were carried out by Chi-square test and Student "t" test. Receiver operator characteristics curve analysis was performed to reveal predictive value of ADAMTS proteins for habitual abortion. Regardless of the statistical test, only a p value ≤ 0.05 was considered significant.

Results: There were no statistically significant differences between the groups according to age, BMI, ADAMTS 13 and 19 levels ($p < 0.05$). However ADAMTS 3 and 16 were significantly higher in the study group ($p = 0.004$, $p = 0.005$, respectively). To estimate the habitual abortion; the cut off values for ADAMTS 3 and 16 were found to be 87.28 (Specificity 68.29%, Sensitivity 64.44%), and 15.75 (Specificity 68.29%, Sensitivity 66.67%), respectively.

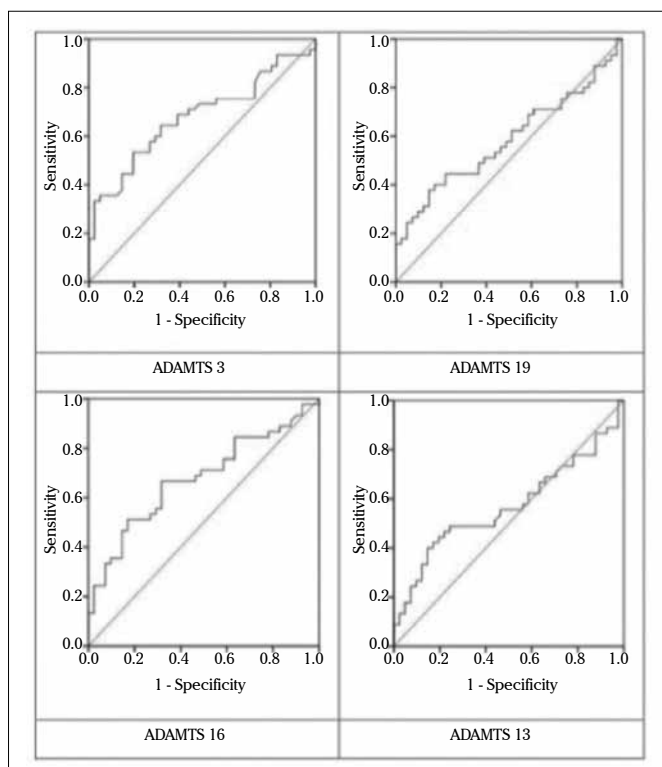


Figure 1. rROC Analysis

Table 1. Demographic characteristics

Variables	Control (n=41)	Habitual Abortion (n=45)	P
Age (years)	31.0 (31.0 – 41.0)	28.0 (20.0 – 45.0)	0.171
BMI (kg/m ²)	25.70 \pm 3.96	24.62 \pm 2.75	0.150
Gravidity	2.0 (2.0 – 6.0)	3.0 (2.0 – 12.0)	<0.001
Parity	2.0 (2.0 – 4.0)	0.0 (0.0 – 2.0)	<0.001
Marriage duration (years)	11.0 (3.0 – 20.0)	7.0 (1.0 – 20.0)	<0.001
Comorbidity	4 (9.8)	6 (13.3)	0.741

BMI: body mass index, Data are presented as mean \pm , median (min-max), and number (percentage). A p value >0.05 is considered statistically significant.

Table 2. Laboratory characteristics

Variables	Control (n=41)	Habitual Abortion (n=45)	P
ADAMTS 3	82.09 \pm 24.49	120.59 \pm 66.05	0.004
ADAMTS 19	16.93 \pm 8.55	23.52 \pm 16.01	0.182
ADAMTS 16	16.46 \pm 7.19	24.89 \pm 15.86	0.005
ADAMTS 13	4.10 \pm 1.91	5.19 \pm 2.83	0.274

Conclusion: In our study, ADAMTS 3 and 16 levels were higher in patients with habitual abortion. Since ADAMTS 16 together with Wilms' tumor protein (Wt1) has a critical role in female gonadal development, higher values in habitual abortion patients created interest if there is a problem of gonadal development in this group of patients. ADAMTS 3 is important in cell adhesion in endometrial cell line. Higher values may be related to the implantation problems in this group of patients.

Keywords: ADAMTS, habitual abortion, implantation

[OP-046]

The diagnostic accuracy of endometrial sampling in endometrial hyperplasia

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Objective: Endometrial hyperplasia (EH) refers to premalignant lesions that characterized with hyperplastic changes in glands and stromal structures flooring uterine cavity. It is observed in 1.5-15% of patients with abnormal uterine bleeding, and 5% of hysterectomy specimens. This study aimed to evaluate the diagnostic stability of preoperative endometrial sampling results of EH, with postoperative hysterectomy specimen evaluations.

Material and Methods: Patients who took a diagnosis of endometrial hyperplasia (EH) by endometrial biopsy and/or hysterectomy at the Gynecology and Obstetrics Department of Dicle University Medical Faculty between January 2006 and July 2014 were evaluated retrospectively. Eighty patients with complete preoperative and postoperative data, and pathology reports confirming EH were included in the study. Age, previous surgeries, menopausal state, endometrial biopsy result, and post-hysterectomy pathology result were obtained from patient records. Sensitivity, specificity, positive and negative predictive values were calculated for endometrial biopsy to predict the lesions in hysterectomy specimens.

Results: Fifty-three of patients were premenopausal, and 27 were post-menopausal. Mean ages were 42.6 ± 4.8 (28-50) years, and 57.5 ± 7.7 (50-79) years for premenopausal and postmenopausal patients, respectively. Endometrial sampling had 71.9% of sensitivity, 87.5% of specificity, 79.3% of positive predictive value, and 82.3% of negative predictive value for determining the exact pathological diagnosis. A patient with a preoperative diagnosis of complex atypia was reported to be endometrial adenocancer (3.8%), and 20 patients (76.9%) had results compatible with endometrial sampling.

Conclusion: Sensitivity and specificity was found to be high in patients who referred with abnormal uterine bleeding, and reported to have premalignant lesions in endometrial sampling. We think that non-surgical follow-ups with endometrial sampling will be a safe way.

Keywords: Endometrial hyperplasia, Endometrial sampling, Hysterectomy

[OP-047]

A preliminary investigation on the use of fourier transform infrared spectroscopy as a non-invasive diagnosis of endometriosis

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Objective: Since patients with endometriosis have altered functional properties in the "eutopic" endometrium including significant aromatase activity and different hormonal environment when compared with regular endometrial tissue from women without endometriosis, investigation of cells and secretions drawn from cervical canal might be projected as a novel technique for the diagnosis of the endometriosis. In this preliminary study, we mainly aimed to evaluate the usefulness and feasibility of FTIR spectroscopy as an alternative method in the diagnosis of endometriosis using cervical fluid swap samples.

Material and Methods: The study was carried out in Department of Obstetrics and Gynecology, Hacettepe University between January-2012 and June-2013. After completion of sample collection, FTIR analysis was performed in Institute of Biotechnology, Ankara University at June-2014. The exclusion criteria were (1) being out of female age 18-45 years, (2) menstrual irregularity, (3) history of abnormal cervical cytology with cervical smear, (4) current or past use of any hormonal drug, (5) intravaginal medication in the last 1 month, (6) presence of IUD and (7) suspicious of leiomyoma and/or adenomyosis with ultrasonography. Prospectively, all women undergoing surgery between 18-45 years were asked to participate the current study before surgical intervention. Cervical swap was taken from patients immediately after induction of anesthesia. After completion of the surgical procedure, patient was assigned to one of the study groups (early or advanced stage endometriosis) or taken as controls, if no lesion was visualized. Regarding the study group, a total of 38 women were eligible for the cervical swap assessment. Of them, 25 were excluded from the final analysis due to following reasons: being out of late follicular phase (n=7), notification of blood in the cervical swap (n=8) or failure to reproduce a waveform with FTIR spectroscopy (n=5). Another 5 samples were used for the standardization and development of the sample collection and FTIR spectroscopy protocols. At last, remaining 13 samples were used for the final analysis. Each saline solution including sample material were freeze-dried and measured using Bruker Tensor 27 FTIR equipped with attenuated total reflectance cell. Spectra were interpreted by OPUS 5.5 software. ANOVA was used for statistical evaluation.

Results: We obtained FTIR spectra of all the samples and used fingerprint region (1750-850 cm⁻¹) for the analyses. We observed 10 significant peaks in the FTIR spectra of samples and they were assigned to different biological molecules such as lipid, carbohydrate, protein and nucleic acid according to their bond structures. We observed some alterations in the levels of various biomolecules between groups. Lipid peak significantly increased in the late stage endometriosis group, compared to controls. Also we performed hierarchical cluster analysis but we did not obtain significant classification of groups.

Conclusion: In conclusion, FTIR has the potential to provide biochemical information about endometriosis from the cervical fluid. FTIR spectroscopy based methods may be useful as a non-invasive, quick and sensitive method. Since this is a preliminary study, the results should be confirmed with larger sample size in order to make reliable multivariable statistics.

Keywords: Endometriosis, non-invasive screening test, FTIR, cervical swap

[OP-049]

A retrospective analysis of surgical site infections in gynecology

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Objective: To evaluate the occurrence of surgical site infections (SSIs) and to identify accompanying risk factors in patients operated for benign gynecological diseases.

Material and Methods: We evaluated the patients operated for benign gynecological diseases between January 2014 and December 2015. Cefazolin prophylaxis was given to all patients. Fourteen patients, hospitalized with a diagnosis of postoperative SSI, were enrolled in the study. Demographic characteristics, operation type, the possible risk factors were evaluated from the patients' medical records retrospectively. Descriptive analysis of the data was presented.

Results: A total of 608 patients were operated for different benign causes in a 2-year time. Among these patients, the routes of operations were laparotomy in 397 patients (65.2%) and laparoscopy in 211 (34.8%). A total of 14 patients were hospitalized for SSI. The overall rate of SSI was 2.3%. The rate was 3.2% for laparotomies, and 0.47% for laparoscopic operations. The mean age, gravidity, parity, body mass index (BMI), preoperative hemoglobin levels, preoperative glucose levels were 49.5 ± 8.5 years, 4.7 ± 2.7 , 3 ± 0.9 , 32.14 ± 3.86 kg/m², 11.2 ± 1.9 , 94.2 ± 10.8 mg/dL, respectively. The mean admission time to the hospital was 11.8 ± 6.6 days after the operation. The indications of the operations were as follows; myoma uteri (n=7, 50%), abnormal uterine bleeding (n=3, 21.4%), recurrent endometrial hyperplasia (n=2, 14.3%), tuboovarian abscess (n=1, 7.1%) and pelvic organ prolapse (n=1, 7.1%). The type of incision was a Phannestiel incision in 12 patients (85.7%), and midline incision in 2 (14.3%). While 13 patients had superficial SSI (92.8%), only one patient (7%) had deep incisional SSI.

Conclusion: SSIs are a type of healthcare-associated infection and can cause significant morbidity and mortality if it is untreated. Because these infections are preventable, healthcare providers should analyze the anatomy, microbiology, patient characteristics and probable risk factors with rational drug usage, and clinical suggestions and evidence-based studies should take part in our routine clinical practice.

Keywords: Surgical site infections, gynecology, outcome

[OP-050]

Two years follow-up of patients with abnormal uterine bleeding after insertion of the levonorgestrel-releasing intrauterine system

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Objective: To evaluate the efficacy and safety of an intrauterine system releasing 20 µg of levonorgestrel per 24 hours in the long-term treatment of heavy menstrual blood loss in women unrelated to intrauterine pathology.

Material and Methods: One hundred six parous women aged 33-48 years with recurrent menorrhagia participated in this study. The women were followed-up for 24 months. They were assessed for intensity of bleeding both for preinsertion periods and for postinsertion periods using the original pictorial blood loss chart (PBAC), uterine volume, and Doppler velocimetry of the uterine arteries, hematocrit, and hemoglobin. An intrauterine device releasing levonorgestrel 20 µg/day was inserted in each patient

within 7 days of the start of menstrual flow. The women were followed-up at 1, 3, 6, 12, 18, and 24 months following insertion of the intrauterine device for clinical and transvaginal ultrasound examinations.

Results: Expulsion of the intrauterine device occurred 2 months after insertion in one patient and she decided to drop out of the trial; three women were lost to follow-up after achieving amenorrhea and expressing satisfaction. The remaining 102 women completed two years of follow-up and had a significant reduction in the amount of menstrual blood loss. The levonorgestrel-releasing intrauterine system (LNG-IUS) was well tolerated by all women and no important systemic hormonal side effects were reported.

Conclusion: Our findings indicate that the LNG-IUS is effective for significantly reducing the amount of menstrual blood loss in women with menorrhagia, even in the presence of adenomyosis, and intramural and subserosal myomas, and renders surgery unnecessary. Mean hemoglobin (g/dL) concentration for all patients was 10.65 ± 1.37 before the beginning of insertion and 12.50 ± 1.00 after 24 months of use of the LNG-IUS, with a mean increase ($p < 0.05$). Pre-treatment of use of the LNG-IUS, endometrial biopsy patterns for irregular proliferative endometrium and for atypical simple hyperplasia were 34/106 (32.08%), and 61/106 (57.55%), respectively and after treatment no abnormal pathologic findings were found ($p < 0.001$).

Keywords: Menorrhagia, Levonorgestrel, LNG-IUS, abnormal uterine bleeding

[OP-052]

Subcutaneous wound infiltration of ketamine is superior to bupivacaine in terms of pain perception and opioid consumption after cesarean section: a double-blinded randomized placebo controlled clinical trial

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Objective: To assess the analgesic efficacy of wound infiltration of ketamine, either alone or as an adjuvant to bupivacaine, following cesarean section (CS) and to compare their effects on postoperative pain scores and opioid consumption.

Material and Methods: Prospective randomized, double-blinded, placebo controlled trial. A total of 120 ASA physical status I-II women, who underwent elective cesarean section under spinal anesthesia, were randomly assigned into four groups. Group K (Ketamine, n=30) received ketamine, Group B (Bupivacaine, n=30) received bupivacaine 0.5%, Group KB (Ketamine+Bupivacaine, n=30) received ketamine+bupivacaine 0.5% and Group P (Placebo, n=30) received 0.9% saline solution. VAS scores at resting and on coughing and analgesic consumptions were compared. Visual analogue scale (VAS) at rest and on coughing, throughout the 15th and 60th minutes, 2nd, 6th and 12th hours, and total morphine consumptions.

Results: Resting VAS score in Group P was significantly higher than in Group KB at the 6th hour interval, while it was significantly lower in Group K and Group KB than in Groups B or P at the 12th hour. Patients receiving placebo had significantly higher coughing VAS scores than those receiving ketamine or ketamine+bupivacaine at 2nd, 6th and 12th hour intervals. Patients in groups P and B required significantly higher doses of morphine than those in groups K or KB.

Conclusion: Post-incisional wound infiltration of ketamine, either alone or in combination with bupivacaine, provides a better postoperative pain relief and reduces postoperative opioid consumption when compared to use of bupivacaine alone.

Keywords: Cesarean section, ketamine, wound infiltration, postoperative analgesia

[OP-053]

Comparison of blood and urine nephrin levels in preeclampsia and intrauterine growth retardation

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Objective: To evaluate the relation between nephrin levels and preeclampsia severity by comparing serum and urine levels of nephrin in the severe and mild groups according to intrauterine growth retardation (IUGR) development.

Material and Methods: A total of 150 patients who were introduced our clinic were included in this study. We have 5 groups; Group 1: 30 patients with mild preeclampsia (MP) and normal fetal development (NFD), Group 2: 30 patients with severe preeclampsia (SP) and NFD, Group 3: 30 patients with MP and IUGR, Group 4: 30 patients with SP and IUGR and Group 5: 30 volunteers who were normotensive and non-preeclamptic. We obtained both blood and urine for measuring nephrin levels.

Results: Serum and urine nephrin levels are presented in Table 1. Having both serum and urine concentration of nephrin compared for both parameters, the levels of severe preeclampsia group +IUGR were measured considerably higher as statistical than all other groups ($p<0.001$). On the other hand, the levels of severe preeclampsia group out of IUGR were measured considerably higher than mild preeclampsia group out of IUGR and control group ($p<0.001$). Urine and serum nephrin levels with gestational age of delivery showed a negative correlation ($r=-0.621$, $p<0.001$) and also urine and serum nephrin levels with birth weight showed a negative correlation too ($r=-0.655$ $p<0.001$).

Conclusion: Our study demonstrates that both serum and urinary nephrin is related with SP and IUGR development. It has been claimed that nephrin may be useful marker for SGA prediction during

Serum and urine nephrine values		Patients with SP and IUGR	Patients with MP and IUGR	Patients with SP and NFD	Patients with MP and NFD	Patients with SP and IUGR	Patients with MP and IUGR	P value
Criteria*								
Serum nephrin values (ng/ml)		7.411a,b,c,d (6.642-8.478)	3.412a (3.012-3.965)	4.285a,b (3.819-5.160)	2.187 (1.679-2.518)	18.385a,b,c,d (17.002-20.23)	9.591a (8.99-10.045)	0.895 (0.555-1.312)
Urine nephrin values (ng/ml)		2.728 (1.67-3.728)		12.035a,b (11.448-12.76)	6.479 (5.575-7.22)			<0.001

*All criterias were calculated by using Kruskal-Wallis a) means that when a data matched with control group $p<0.001$ b) means that when a data matched with MP and NFD group $p<0.001$ c) means that when a data matched with SP and NFD group $p<0.001$ d) means that when a data matched with MP and IUGR group $p<0.001$

the first trimester; however, it may be useful for the detection of preeclampsia, only in the third trimester. It has been found that nephrin may be a marker of subclinical renal damage, can be detected before overt proteinuria and the full clinical features of preeclampsia develops. We found that both serum and urine nephrin levels were highest in SP and IUGR group. Moreover SP and NFD group had considerably elevated serum and urine nephrin levels. MP and IUGR group had higher serum and urine nephrin levels than control group. We are of the opinion that increasing levels of nephrine is related to preeclampsia severity and IUGR development. This is the first study in literature which illustrated positive correlation between serum-urine nephrine levels and IUGR on the basis of preeclampsia.

Keywords: Nephtrin, intrauterine growth retardation, preeclampsia

[OP-054]

What is frightening the multiple cesarean section?

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Objective: The surgical complications were compared between the patients with three or less prior cesarean deliveries and four or more prior cesarean deliveries in this study.

Material and Methods: Records of 120 patients with cesarean sections in our department of Obstetrics and Gynecology between August 2015 and November 2015 were retrospectively studied. Cases were reviewed regarding the age, type of operation, type of anesthesia, number of cesarean sections, time of hospitalization, intraoperative and postoperative complications.

Results: Cesarean section had performed in 62 (51.7 %) patients whose cesarean number was ≤ 3 , and 58 (48.3 %) patients had multiple cesarean sections that greater than four. Patients with four or more prior cesarean has an increased rate of intraabdominal adhesions compared with the other group. There was no significant difference in the gestational weeks, neonatal admission rate, incidence of cesarean hysterectomy, uterine scar rupture, placenta previa with placental invasion anomalies, bladder and bowel injuries, incidence of peripartum haemorrhage and blood transfusion rate between the two groups. The complication rates of both groups are presented in Table 1.

Conclusion: There was no more risk for maternal complications in patients with four or more prior cesarean, excepting intraabdominal adhesions. Therefore, it is difficult to give an exact safe upper limit for repeated cesarean section. We think to inform the patients about the risks of repeated cesarean section but not to intimidate them.

Keywords: Multiple cesarean, complications, maternal risk

Complication rates of patients in both groups

Complications (PN*)	CS number ≤ 3 (n: 62)	CS number ≥ 4 (n:58)	p
General complication rates	17 (7.4%)	13 (22.4%)	>0.05
Bleeding	11 (17.7%)	8 (13.8%)	>0.05
Blood transfusion	10 (16.1%)	6 (10.3%)	>0.05
Intra-abdominal adhesion	12 (19.4%)	34 (58.6%)	<0.001
Bladder injury	1 (1.72%)	1 (1.70%)	>0.05
Bowel injury	0	1 (1.70%)	>0.05
Placental invasion abnormality	9 (14.5%)	6 (10.3%)	>0.05
Rupture	2 (3.2%)	1 (1.70%)	>0.05
Cesarean hysterectomy	3 (4.8%)	2 (3.4%)	>0.05
Intensive care unit	16 (25.8%)	8 (13.8%)	>0.05
Neonatal death	4 (6.5%)	2 (3.4%)	>0.05

*PN: patient number

[OP-056]

Is there a relationship between amniotic fluid cytokines levels and postterm pregnancy

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Objective: To research amniotic fluid pro-inflammatory and anti-inflammatory cytokine levels in patients with postterm pregnancy and to determine whether there was any relationship between these cytokines and postterm pregnancy.

Material and Methods: This prospective study included 92 patients, separated into 3 groups as postterm (Group 1, n=29), full-term in labour (Group 2, n=28) and control (Group 3, n=30). 5 patients were excluded from the study. All patients were evaluated in respect of age, gravidity, parity, obstetric history, gestation week, cervical dilatation and effacement, maternal serum C-reactive protein and white cell count, amniotic interleukine 4, 6 and 10 levels, birthweight and cord blood pH.

Results: The amniotic fluid interleukine 10 level was 24.4 ± 8.8 pg/mL in the postterm group, 13.5 ± 5.1 pg/mL in the term in labor group and 19.8 ± 5.4 pg/mL in the control group ($p < 0.001$). The amniotic fluid interleukine 4 level was 86.5 ± 57.7 pg/mL in the postterm group, 38.2 ± 29.2 pg/mL in the term in labor group and 81.9 ± 68.4 pg/mL in the control group ($p = 0.002$). The amniotic fluid interleukine 6 level was 329 ± 135.1 pg/mL in the postterm group, 252.8 ± 138.7 pg/mL in the term in labor group and 227.9 ± 114.4 pg/mL in the control group ($p = 0.02$). There was positive correlation between gestational age and amniotic fluid anti-inflammatory cytokine levels ($p < 0.05$).

Conclusion: Both pro-inflammatory and anti-inflammatory cytokine levels in amniotic fluid were increased in patients with postterm pregnancy. These results may play a role in etiopathogenesis of postterm pregnancy.

Keywords: Amniotic fluid, cytokines, postterm pregnancy

[OP-057]

Impairment of thiol disulphide homeostasis in preeclampsia

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Objective: To investigate the effects of severity of preeclampsia on thiol-disulphide homeostasis (TDH).

Material and Methods: A total of 108 participants were divided into three groups: Group 1 was composed of pregnant women with no obstetric complications, group 2 included pregnant women with mild preeclampsia, and group 3 consisted of pregnant women with severe preeclampsia. TDH parameters were determined, and comparisons of clinical and routine laboratory test findings were made in all groups.

Results: The serum native thiol level was 347.9 ± 27.4 in the control group, 237.2 ± 44.2 in the mild preeclampsia group, and 227.9 ± 53.1 in the severe preeclampsia group ($p < 0.001$). The serum total thiol level was 376.1 ± 31.9 in the control group, 261.8 ± 49.4 in the mild pre-eclampsia group, and 248.3 ± 57.4 in the severe preeclampsia group ($p < 0.001$). The disulphide level was 14.1 ± 5.6 in the control group, 12.3 ± 5.1 in the mild preeclampsia group, and 10.2 ± 4.8 in the severe pre-eclampsia group ($p = 0.001$). A significant correlation between impairment in degree of TDH and severity of preeclampsia was observed.

Conclusion: Impairment of TDH in women with preeclampsia increased with disease severity. Therefore, impaired TDH may have a role in the etiopathogenesis of the disease.

Keywords: Disulphide, preeclampsia, thiol

[OP-058]

Evaluation of maternal hemorrhage in placenta accreta

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Objective: The aim of the present study is to provide a retrospective evaluation of placenta accreta cases to identify the factors affecting the blood transfusion requirement, which stands as one of the most important causes of maternal mortality and morbidity.

Material and Methods: A total of 110 patients who presented to the Outpatient Clinic of Gynaecology and Obstetrics of the Faculty of Medicine of Dicle University and were diagnosed with placental attachment before or during a caesarean section (C-section) between January 2006 and June 2015 were included in this study. The patients' data were collected from the hospital's records.

Results: During the study period, 21674 births were realised and 110 (1/200) of these patients exhibited placenta accreta. 86 of these 110 patients (78,2%) received at least one unit of blood. Demographic parameters of the patients are shown in Table 1. The group of patients that had received blood transfusion exhibited significantly higher val-

Table 1. Evaluation of patients according to demographic data

	Mean \pm S.D.	Median (Min-max)
Year	32.6 \pm 5.6	33(17-49)
Parity	3.6 \pm 2.1	3(0-11)
Gestational week	34.7 \pm 3.4	35(16-40)
The number of cesarean delivery	1.8 \pm 1.1	2(0-4)
Estimated blood loss (ml)	1715 \pm 1105	1500(200-6000)
The number of blood transfusions	2.2 \pm 2.2	2(0-14)
Number of days in hospital stay	5.3 \pm 3.4	4(2-26)
Data were expressed in means \pm standard deviations and median (min-max) Abbreviations: S.D.: Standard deviations		

Table 2. Parameters indicating positive correlation with blood transfusion and results of logistical regression analysis

	Pearson's correlation (r)	p	Logistic regression (95% CI OR)	p
Year	0.277**	0.003	1.099 (0.981-1.232)	0.105
Parity	0.271**	0.004	1.175 (0.858-1.610)	0.315
Number of days in hospital stay	0.269**	0.004	2.005(1.213-3.314)	0.007
The number of cesarean delivery	0.215*	0.024	1.452 (0.902-2.336)	0.125
The (Pearson's) correlation coefficients (r) and logistic regression (95 % Confidence Interval Odds Ratio) are given in the table. P < 0.05 was considered statistically significant				

ues in age, parity, number of C-sections, length of stay ($p = 0.003$, 0.004 , 0.024 , 0.000 , respectively). Multiple logistical regression analysis led to the identification of a significant association between the length of stay and the blood transfusion requirements (OR 95% CI 2.005 (1.213-3.314) $p = 0.007$) (Table 2).

Conclusion: Patients of advanced age as well as grand multiparous patients and patients with a history of multiple repeat caesarean deliveries should be evaluated more carefully during pregnancy. These patients should be referred to hospitals that provide multidisciplinary care and management before the delivery or even at the early stages of pregnancy in an effort to bring down maternal mortality and morbidity rates.

Keywords: Placenta accreta, maternal haemorrhage, morbidity

[OP-059]

Evaluation of the relationship between methyltetrahydrofolate reductase (MTHFR) gene polymorphism, folate metabolism and homocysteine value in father-mother-child as a risk of Down's syndrome: a clinic study

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Objective: The objective of our study is evaluating the relationship folate/homocysteine metabolism with having a child with Down syndrome (DS) as well as mother, father and the child.

Material and Methods: 48 families who have children with DS (father, mother, child with DS) and as control group 20 families (father, mother, child) who had not experienced miscarriages or abnormal pregnancies and delivered a healthy child, were studied. The mothers were separated into two groups above 35 years of age and under 35 years of age. MTHFR gene C677T and A1298C polymorphisms, Vit-B6 (vitamin B6), Vit-B12 (vitamin B12), folic acid and homocysteine (Hvc) levels were analyzed in these families.

Results: In our study no relationship was found between DS and MTHFR gene polymorphisms, Vit-B12 and Vit-B6 levels in parents. Mothers and fathers with folic acid value less than 8.4 which is although in the reference range, were found more risky in terms of DS in logistic regression analysis and detailed Blogreg analysis (Odds Ratio (OR): 5.405, 3.745, respectively). Hcy levels were found higher in 26.3% of the fathers in mothers with a DS child (DSM) group under 35 years

Table 1.

[illegible]

of age and it was statistically significant with DS. However Hyc levels were within normal values in other father groups and higher in all mothers except in DSM over 35 years of age which were less higher and statistically significant. There was no significant difference between children with DS and healthy children in terms of MTHFR gene polymorphisms, T allele frequency and Vit-B6, folic acid, Hyc plasma levels. Vit-B12 values were found higher in 25% of the children with DS and a statistically significant difference was found.

Conclusion: Despite all scanning methods in pregnancy, the majority of pregnancies with DS cannot be identified prenatally. The current idea about the complex relationship between folate/hyc metabolism and DS; the diet and life style of mother with maternal and embryonic combinations which including polymorphisms in genes especially in folate metabolism are associated with survival of fetus with DS. However, the maternal age and paternal transfer makes the role of folate metabolism more complicated in having a baby with DS. According to the results of our study, it seems that along with the future studies fathers will have to take the folic acid support in preconception period as mothers to prevent DS.

Keywords: Down syndrome, mother, father, child

[OP-060]

Nifedipine increases foetoplacental perfusion

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Objective: Our aim is to evaluate the effect of nifedipine on foetoplacental haemodynamic parameters.

Material and Methods: A retrospective study was conducted at a tertiary centre with patients for whom nifedipine treatment was decided on for the preterm birth. We combined the pulse Doppler imaging parameters with greyscale imaging via the Bernoulli theorem, which is called the "Continuity Equation", to get the foetoplacental perfusion. Evaluated parameters were the resistance index (RI), the pulsatility index (PI), systole/diastole ratios (S/D), the velocity-time integral of the umbilical artery (VTI), the radius of umbilical artery, the peak systolic velocity and the mean pressure gradient in the umbilical artery. From these parameters, the foetoplacental perfusion was acquired.

Results: We found that the RI, the PI and the S/D ratio did not change after treatment with nifedipine. The mean pressure gradient, the VTI and the peak systolic velocity increased after treatment with nifedipine. VTI, which is the amount of blood passing through a unit area of the umbilical artery per heartbeat, increased statistically from 0.082 ± 0.021 cm² to 0.100 ± 0.026 cm². The amount of blood passing through the umbilical artery per minute (FPP) was 166 beat.cm³ / minute before treatment with nifedipine, which increased to 220 beat.cm³ /minute after treatment with nifedipine. Nifedipine thus increases the blood flow from the foetus to the placenta.

Conclusion: We found that nifedipine increases the blood flow from the foetus to the placenta. Before treatment with nifedipine, FPP was 166 beat.cm³/minute and after nifedipine treatment it was 220 beat.cm³/minute, with a 24.5% increase in the amount of blood passing through the placenta. However, in previous studies, it has been shown that the mitral valve and tricuspid valve VTI (the foetal-cardiac downstream distribution), which is the amount of blood passing through the cardiac

Effect of nifedipine on pulse doppler and hemodynamic parameters of umbilical artery

	Before nifedipine	After 24 hour of nifedipine	P value
UA PI	0.90 ± 0.14	0.92 ± 0.11	0.24
UA RI	0.65 ± 0.12	0.63 ± 0.39	0.53
UA S/D	2.73 ± 0.22	2.67 ± 0.29	0.26
VTI (m)	0.082 ± 0.021	0.100 ± 0.026	0.00 [#]
HR(beat/minute)	145.1 ± 8.2	145 ± 7.8	0.19
UA r (mm)	4.15 ± 0.55	4.35 ± 0.58	0.03 [#]
FPP(beat.cm ³ /minute)	166 ± 73.8	220 ± 83.3	0.01 [#]
MeanPG (mmHg)	0.24 ± 0.15	0.30 ± 0.19	0.03 [#]
PSV (cm/s)	0.30 ± 0.08	0.36 ± 0.09	0.02

Abbreviations: UA PI, Umbilical artery pulsatility index; UA RI, Umbilical artery resistance index; UA S/D, umbilical artery systole diastole ratios; VTI, velocity time integral, HR; heart rate; UA r, umbilical artery radius; FPP, fetoplacental perfusion; MeanPG, mean pressure gradient; PSV, peak systolic velocity.

valve per cardiac cycle, did not change after treatment with nifedipine (8). Although the intracardiac valvular blood flow did not change, the umbilical artery blood flow increased. This may result from the complex redistribution of blood flowing in the foetal and placental system. In this complex system, nifedipine increased the placental blood flow. The effects of this increased blood flow from the foetus to the placenta must be studied, especially in growth-restricted fetuses. While decreasing the blood pressure, nifedipine increases the mean pressure gradient, which is the main propulsive force of the blood flow. This can be explained by using the following biophysical formulation. By applying Ohm's Law to the fluid flow, ΔP is the pressure gradient or pressure difference and is the pressure difference between the venous and arterial system, R is the resistance of the vascular system and F is the flow. Flow is calculated in the formula, depicted as(20):

$$F = \Delta P / R = ((PA - Pv)) / R$$

PA= Arterial pressure

Pv= Venous pressure

R= Vascular resistance

F=Flow

Nifedipine probably decreases pressure to a greater extent in the venous system (PV) than in the arterial system (PA). This increases the pressure gradient (ΔP), and then the blood flow to the placenta.

Keywords: Nifedipine, fetoplacental, perfusion

[OP-061]

Can the gestational diabetes screening predict the preeclampsia?

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Objectives: Our aim was to evaluate patients who underwent OGTT testing in our study population in order to examine maternal characteristics and associated perinatal outcomes.

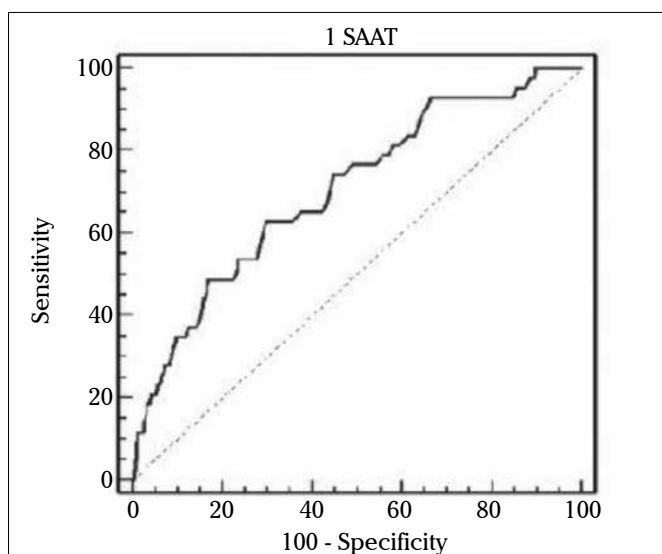


Figure 1. The ROC curve evaluating the effectiveness of 1- hour blood glucose level in preeclampsia prediction (AUC: 0.7, $p=0.018$)

Table 1. The relationship between 50 gr OGTT and preeclampsia

	Preeclamptic group n:43	Normotensive group n: 583	P
FBG (mg/dL) (m)	83.9	78.2	0.003
1.hour BG (mg/dL) (m)	149.1	122.6	<0.001

FBG: fasting blood glucose; BG: blood glucose; m: mean

Material and Methods: Our study population constituted of 636 pregnant women who underwent OGTT testing at a university affiliated hospital between January 2011 and July 2013. Demographic, perinatal and neonatal results were reported.

Results: According to our results; Group 1 constituted of 464 patients with normal 50 gr OGTT results. Group 2 of 71 patients with elevated 50 gr OGTT results but normal 100 gr OGTT results. Group 3 constituted of 29 patients with elevated 50 gram OGTT results and one elevated result obtained from the 100 gr OGTT. Group 4 constituted of 62 patients diagnosed with gestational diabetes. There was a significant difference regarding; age, parity, presence of preeclampsia and polyhydramnios among the groups. Other parameters did not differ among groups.

Conclusion: Even though there are differences among ethnic groups regarding the results of 50 gram OGTT; the tolerance test may be used to predict preeclampsia. Our results revealed a positive correlation between blood glucose levels and onset of preeclampsia. Further studies in this field are warranted.

Keywords: Gestational diabetes mellitus, preeclampsia

[OP-062]

Obstetric outcomes of isolated oligohydramnios during early-term, full-term and late-term periods and determination of optimal timing of delivery

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Objective: Our aim is to evaluate the obstetric outcomes of isolated oligohydramnios during the early-term, full-term, and late-term periods, and to determine the optimal timing of delivery.

Material and Methods: Retrospective study was performed at a tertiary center. Isolated oligohydramnios was divided into early term, full term, and late term. Evaluated outcomes were fetal birth weight, 5 minute Apgar score lower than 7, meconium-stained amniotic fluid, neonatal intensive care unit (NICU) admission, transient tachypnea of newborn (TTN), requirement of ventilator, newborn jaundice, mode of delivery, induction of labor, and undiagnosed SGA before delivery. Composite outcome was defined as perinatal outcomes taken together (NICU admission, TTN, requirement of ventilator, and newborn jaundice).

Results: The study period included 1213 cases of term isolated oligohydramnios. Within this cohort there were 347 early-term, 781 full-term and 85 late-term patients. The caesarean rate and the rate of newborn jaundice were higher in early-term (37.8%, 3.5%) than in full-term cases (30.1%, 0.9%). Meconium-stained amniotic fluid was higher in late-term than full term cases. Timing of delivery did not affect occurrence of TTN, 5 minute Apgar score below 7, ventilator requirement, or composite outcome. Isolated oligohydramnios showed 15% to 17% undetected SGA (Table 1).

Conclusion: The timing of delivery in isolated oligohydramnios is controversial. Generally, delivery is recommended at 37 weeks. However, in our study, we found that early intervention (during early term) did not improve perinatal outcomes when compared to the expectant management of up to 39 weeks. Moreover, early intervention is associated with higher neonatal, post-neonatal and infant mortality rates compared with full term births 20. The rationale of the recommendation for early intervention is undetected IUGR and complications associated with IUGR. We also found that early intervention was associated with a higher caesarean rate and newborn jaundice. In our study, the risk of meconium-stained amniotic fluid and increased rate of caesarean and newborn jaundice was higher in the late-term period. Previous studies have shown that, in term oligohydramnios, any intervention to terminate the pregnancy for fetal well-being increases the caesarean rate without improving perinatal outcomes. However, these studies have accepted the term period as between 37 to 42 weeks. In isolated oligohydramnios, delivery should be recommended during the full term, as early and late interventions are associated with unwanted obstetric complications.

Keywords: Isolated, Oligohydramnios, obstetric outcome

[OP-063]

Comparing neonatal respiratory morbidity in neonates delivered after 34 weeks of gestation with and without antenatal corticosteroid

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Objective: To investigate the effect of antenatal corticosteroid prophylaxis on neonatal respiratory morbidity after 34 weeks of gestation.

Material and Methods: In this retrospective study we evaluated the neonatal respiratory complications of 683 low risk singleton pregnancies delivered at 34-37 weeks of gestation in a tertiary center between Jan 2012 and sept 2014. Exclusion criteria included maternal systemic disease, multiple gestation, major fetal congenital anomaly, evidence of intrauterine infection. The record of all women were divided into two groups: Group 1 (n=389) comprised data of woman who empirically received betamethasone after 34 weeks of gestation for cases at risk of preterm birth, and Group 2 comprised those who did not receive betamethasone (n=294). Demographic characteristics, mode of delivery, fetal birth weight and neonatal respiratory complications was compared between the two groups. Neonatal respiratory morbidity was defined as any respiratory disease that required medical support including supplemental oxygen, nasal continuous positive airway pressure, endotracheal intubation, or exogenous surfactant, with more than 25% oxygen for > 10 minute to maintain neonate oxygen saturation >90% (1)

Results: Mode of delivery, fetal sex, birth weight and gestational week at birth were not different between the groups. The incidence of neonatal respiratory morbidity was similar (15,3% in the control group and 14,9% in the intervention group; p=0.88). When infants grouped according to development of neonatal respiratory morbidity, there were no statistically significant differences with regard to the mothers age, mode of delivery and indications of cesarean section in cases with and without neonatal respiratory morbidity. There was no statistical difference for neonatal respiratory morbidity development rate between cases received betamethasone or those with not received. The number of betamethasone intervention or interval between intervention and delivery were similar in cases with and without neonatal respiratory morbidity.

Conclusion: There is no beneficial effect of betamethasone administration empirically after 34 weeks of gestation for preventing neonatal respiratory morbidity

Keywords: Neonatal respiratory morbidity, corticosteroid administration, after 34 weeks of gestation

[OP-064]

Skin incision lengths in caesarean section

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Objective: This study aims to examine the factors affecting skin incision lengths in caesarean section.

Material and Methods: We enrolled 201 pregnant women who delivered by caesarean section. Skin incision lengths in caesarean section were measured with a ruler on the first postoperative day. We categorized the patients into two groups, where group 1 had their caesare-

Table 1. Demographic characteristics for all patients

Characteristics	Mean±Sd	Min-Max	25%	75%
Age (Years)	28.7±4.7	18-39	21	31
BMI (kg/m ²)	25.2±4.3	14.9-39.7	21.9	28.3
Gravidity	2.2±1.0	1-6	2	3
Parity	1.0±0.7	0-4	1	1
Estimated Fetal Weight (g)	3315±425	2500-4922	2990	3581
Incision length (mm)	156.9±14	127-195	146	165
BMI: Body mass index, The results are expressed as means ± Standard Deviation (S.D.)				

Table 2. Demographic characteristics for subgroups

Characteristics	Group 1 (Residents) (n:96)	Group 2 (Specialists) (n:105)	p value
Age	28.6±4.6	28.7±4.1	NS
BMI (kg/m ²)	25.1±4.3	25.3±4.3	NS
Gravidity	2.3±1.0	2.2±1.0	NS
Parity	1.0±0.7	1.0±0.7	NS
Estimated Fetal Weight (g)	3307±377	3322±466	NS
Incision length (mm)	159.5±13.1	154.5±14.8	<0,05
BMI: Body mass index, The results are expressed as means ± Standard Deviation (S.D.)			

an sections performed by senior residents and group 2 by specialists. Demographic patient data, estimated fetal weights, and skin incision lengths were calculated.

Results: Patients age was 28.7±4.7 years, gravidity was 2.2±1.0, parity was 1.0±0.7, body mass index (BMI) was 25.2±4.3, and estimated fetal weight was 3,315±425 g. Skin incision lengths were 156.9±14, 159.5±13.1, and 154.5±14.8 mm for all surgeons, only senior residents and only specialists, respectively. Skin incision length was correlated with fetal weight, maternal BMI, gravidity, and parity (p<0.001). In additions, skin incisions made by specialists were smaller skin than those made by residents (p=0.011) (Table 1 and Table 2)

Conclusion: Surgical experience is not the only factor affecting the skin incisions in caesarean section; fetal weight, maternal BMI, gravidity, and parity also affect skin incision length.

Keywords: Caesarean section, Pfannenstiel incision, Skin incision length

[OP-065]

Ultrasound-guided versus classic surgical transversus abdominis plane block in obese patients following caesarean section: a prospective randomised study

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Objective: The classic transversus abdominis plane block (TAP), commonly used for post-operative analgesia following lower abdominal surgery, and involves blockade of the T7-L1 intercostal, subcostal, ilioinguinal and iliohypogastric nerves that provide sensory innervation to the abdominal wall. The technique involves analgesic agent introduction into the lateral abdominal wall and between the internal oblique and transversus abdominis muscles (termed as TAP). The classic blind method is associated with several complications therefore, it has been replaced by ultrasound-guided (USG) TAP. However, serious technical difficulties, similar to those reported for classic TAP block, have been reported with the use of USG-TAP, particularly in obese patients. The surgical TAP block, a novel technique, can be performed safely in obese patients in whom muscle layers cannot be sufficiently exposed. Here, we compared applicability, efficacy and complications of surgical TAP and USG-TAP blocks in obese pregnant women following caesarean section under general anaesthesia.

Material and Methods: Seventy-five pregnant women with pre- and post-pregnancy body mass index (BMI) >30 were randomised and divided into two groups: USG-TAP block (UT group; n = 38) and surgical TAP block (ST group; n = 37). The USG probe was inserted between the costal margin and iliac crest; a 20-gauge 150-mm regional anaesthesia needle was advanced at the same level as the USG probe using an in-plane technique after visual confirmation of three muscle layers (external oblique, internal oblique and transversus abdominis). Then, 20 mL of 0.25% bupivacaine was administered (Figure 1). The ST group, received the block procedure after uterus closure and haemostasis. Following palpation of the lateral margin of the rectus muscle and inferior epigastric vessels by the surgeon using an elevator, a needle was advanced through the parietal peritoneum and transversus abdominis muscle. Following transversus abdominis muscle fascia puncture, 20 ml of 0.25% bupivacaine was intra-abdominally injected into the TAP at the midpoint of the line connecting the crista iliaca and inferior costal margin (Figure 2). Visual analogue scale (VAS) scores at post-operative 0, 2, 6, 12 and 24 h, time to first analgesic requirement, total analgesic consumption

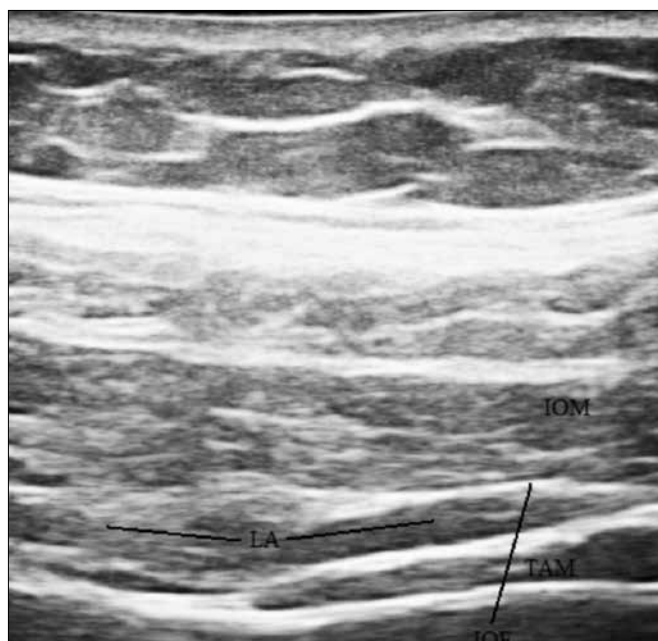


Figure 1. Spread of local anaesthetic (LA) within the transversus abdominis plane between the IOM and TAM following injection and downward displacement of the IOF (USG-TAP block)



Figure 2. Intra-abdominal access of a blunt-ended needle into the transversus abdominis plane through the transversus abdominis muscle (surgical TAP block)

Table 1. Age, ASA, operative duration, block procedure time, time to first analgesic requirement and satisfaction values of patients according to study group

	STB n=37	UTB n=38	p value
Age	30.2±5.17	29.4±5.41	0.490
ASA	2 (2-1)	2 (2-1)	0.628
Operative duration (min)	40.2±2.66	40.5±2.81	0.716
Block procedure time (min)	7 (10-4)	10 (12-8)	<0.001
Time to first analgesic requirement (min)	513.2±102.78	476.6±125.59	0.168
Total analgesic consumption in 24 h (mg)	91.1±34.00	96.9±46.38	0.539
Patient satisfaction	9 (10-5)	9 (10-4)	0.962

tion amount in 24 h, post-operative side effects, complications and patient satisfaction were recorded.

Results: Age, American society of Anesthesiologist (ASA) score, operative duration, mean time to first analgesic requirement and total analgesic consumption in 24 h were similar between groups. Block procedure durations were 7 and 10 min in ST and UT groups, respectively (Table 1). Statistically significant increases in BMI were observed during pregnancy in both groups. ($P < 0.01$). No significant differences in VAS scores were observed between the groups at all times ($p > 0.05$ for all). No patients developed complications.

Conclusion: USG and surgical TAP blocks were safe and had similar efficacy in providing post-operative analgesia in obese pregnant women following caesarean section under general analgesia. Therefore, our study's results demonstrate that surgical TAP block is an efficacious, safe and rapid technique, particularly in patients in whom sensory blockade is technically challenging, and does not require additional equipment.

Keywords: Analgesia, Caesarean section, Pregnant women, Transversus abdominis plane block, Visual Analogue Scale

[OP-066]

Evaluation of the relationship between sTWEAK (TNF-related weak inducer of apoptosis) levels and first trimester vaginal bleeding in pregnant women

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Objective: Vaginal bleeding is a serious complication of the first trimester with a rate of 7-25%. But the exact etiology of vaginal bleeding is still not identified. Tumor Necrosis Factor (TNF)-related weak inducer of apoptosis (TWEAK), is a cytokine related to TNF superfamily and CD163 is newly described as an alternative soluble receptor for circulating sTWEAK. In this study we aimed to study the relationship between vaginal bleeding and sTWEAK, sCD163 levels and sTWEAK/sCD163 ratio and their effects on perinatal outcomes.

Material and Methods: Seventy (41 in abortus imminens and 29 in control group) gestational age matched (6-14 weeks) pregnant women who were attended to Obstetrics and Gynecology Departments of Muğla Sıtkı Koçman University and İzmir Tepecik, Training and Research Hospitals between April-July 2015 were included. Maternal sTWEAK and sCD163 levels were evaluated by ELISA kits (eBioscience, An Affymetrix Company, Austria for sTWEAK; Human sCD163 ELISA Ready-SET Go! eBioscience Products for sCD163). Antenatal complications (gestational diabetes, preeclampsia, intrauterine growth restriction, oligohydramnios, polyhydramnios), perinatal outcomes (delivery mode, birth weight, delivery week) were recorded. Women with vaginal bleeding were subgrouped as miscarriage/alive birth and having subchorionic hematoma or not. Statistical analysis was performed by using Student's t-Test, Mann Whitney U Test, Chi-Square Test and Pearson Correlation Test. P<0.05 was considered as statistically significant.

Results: There were no statistically significant differences by means of sTWEAK, sCD163 levels and sTWEAK/sCD163 ratio and antenatal complications between abortus imminens and control group. But higher sTWEAK levels were significantly related to higher rates of miscarriage in abortus imminens group (P=0.014). sCD163 levels were significantly lower in subchorionic hematoma subgroup of abortus imminens group (P=0.043). (Table 1,2,3,4,5)

Conclusion: TWEAK is a transmembrane glycoprotein of TNF superfamily and produced in many tissues like pancreas, heart, brain, liver and ovary. sCD163 was reported to be expressed on endometrial glands and surface epithelium during proliferative and luteal phase. TWEAK/CD163 interaction was also reported to regulate inflammation. This interaction was thought to act on hormonal changes during pregnancy besides the effects on cell growth and survival. Since CD163 was reported to have ovarian steroid related modulation on

Table 1. sTWEAK and CD163 levels and sTWEAK/CD163 ratio in miscarriage and alive birth subgroups of threatened abortion group

	Miscarriage	Alive birth	P value
sTWEAK (pg/mL)	690.4 (368.4-1205.4)	513.9 (297.4-854.4)	0.014
CD163 (ng/mL)	660.7±260.9	691.5±357.4	0.797
sTWEAK/ CD163	1.2±0.5	0.9±0.4	0.158
Median (min-max), Mann Whitney U-test was used for statistical analysis, Mean (±SD), Student's t test was used for statistical analysis. *p<0.05 was considered statistically significant			

Table 2. sTWEAK and CD163 levels and sTWEAK/CD163 ratio in subchorionic hematoma subgroups of threatened abortion group

	Subchorionic hematoma (+)	Subchorionic hematoma (-)	P value
sTWEAK (pg/mL)	562.4 (297.4-854.4)	533.2 (349.4-1205.4)	0.969
CD163 ng/mL (ng/mL)	565.6±219.8	775.3±377.1	0.043*
sTWEAK/ CD163	1.1±0.5	0.9±0.4	0.157
Median (min-max), Mann Whitney U-test was used for statistical analysis, Mean (±SD), Student's t test was used for statistical analysis. *p<0.05 was considered statistically significant			

IL 18 expression in sheep endometrial epithelial cells, estrogen/progesteron dependent decreases in IL-18 levels in maternal-fetal surface was thought to be responsible for the survival of pregnancy. We hypothesized that sTWEAK and CD163 levels might have relation with pregnancy outcomes in patients having first trimester vaginal bleeding. According to results of our study, the difference of sTWEAK, sCD163 levels and TWEAK/CD163 ratio were not statistically significant between groups. But sTWEAK levels were significantly higher in miscarriage subgroup of abortus imminens group. This is the first study in the literature reporting a relationship between the outcome of pregnancy and sTWEAK levels. This evidence might be the preliminary steps of improving protocols for prevention and treatment of vaginal bleeding patients with high risk of miscarriage. Prospective studies with extended number of patients were required to identify the role of sTWEAK in this mechanism.

Keywords: Perinatal outcome, pregnancy, sCD163, sTWEAK, vaginal bleeding

[OP-067]

Comparison of systemic and local methotrexate treatments in cesarean scar pregnancies: time to change conventional treatment and follow-up protocols

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Objective: The aim of this study was to compare the systemic and local methotrexate (MTX) in the treatment of cesarean scar pregnancies (CSP).

Material and Methods: In this retrospective cohort study, we collected data of 44 patients with CSP. The patient were grouped according to treatment modality; Group 1: local MTX injection (n: 17) and, Group 2: systemic MTX (n: 27). Systemic multidose protocol included administration of 1mg/kg four doses of MTX, altering with 0,1 mg/kg leukoverin injection intramuscularly. Local MTX injection protocol was applied the gestasyonel sac was punctured and aspirated using transvaginal ultrasound guide and 16 G, oocyt pick-up double-lumen aspiration needle (Swemed Med, Follicle Aspiration Needle, 1,5x350 mm, double lumen, tubing 1000-1000, Vitrolife). After aspiration 50 mg MTX

instilled slowly into the gestasyonel sac. The groups were compared with respect to side-effects, recovery time, reproductive outcome and cost.

Results: The mean gestational age at diagnosis (6.4 ± 0.93 vs 5.4 ± 0.80 weeks, $p = 0.001$), the pretreatment serum β -human Chorionic Gonadotrophin (β -hCG) level [27970 (11010-39421) vs 7606 (4725-16996) mIU/mL $p = 0.001$], the lesion size (2.74 ± 1.36 and 1.28 ± 0.55 cm $p = 0.001$) were higher in Group 1. All patients were cured by primary therapy without additional surgery. The mean times for β -hCG normalization, the uterine mass disappearance were significantly shorter in Group 1 than Group 2 (6.17 ± 1.55 vs 8.11 ± 2.0 weeks $p = 0.001$ and 10.47 ± 4.14 vs 13.40 ± 4.44 weeks, $p = 0.002$, respectively). The cost of treatment was similar between groups (281.133 ± 112.123 \$ vs 551.134 ± 131.792 \$ $p = 0.76$). The total pregnancy rates were not different between groups (5/16, 31.4% vs. 6/11, 54.6%, $p = 0.301$). There was one recurrent CSP that occurred after systemic MTX. The most common side effect was oral ulcers that were seen in seven patients in Group 2.

Conclusion: Though treatment success and reproductive outcome are similar, local MTX is superior to systemic MTX with regard to recovery time, side effect and cost, even in patients with unfavorable pre-treatment prognostic predictors. According to our results, conventional treatment and follow-up protocols of local and systemic MTX should be revised.

Keywords: Cesarean scar pregnancies, methotrexate, local injection

Table 1. Comparison of demographic and pre-treatment clinical parameters between groups

	Local injection (mean \pm SD)	Systemic administration (mean \pm SD)	P value
Age(years)	32.76 \pm 5.25	31.07 \pm 4.17	0.243
BMI(kg/m ²)	25.83 \pm 2.16	25.77 \pm 4.85	0.933
Gravidity (times)	3.17 \pm 0.80	2.96 \pm 0.89	0.430
Parity (times)	1.52 \pm 0.51	1.70 \pm 0.72	0.393
Cesarean sectio(times)	1.4 \pm 0.51	1.6 \pm 0.62	0.387
Gest age(weeks)	6.4 \pm 0.93	5.4 \pm 0.80	0.001
Pretreatment serum β -hCG level (mIU/mL)	27970 (11010-39421)	7606 (4725-16996)	0.001
Gestasyonel Sac size(cm)	2.74 \pm 1.36	1.28 \pm 0.55	0.0001
Interval between current CSP and last cesarean (months)	39.05 \pm 12.69	39.25 \pm 15.96	0.965
Positive heart beath	17/17(%100)	10/27(37%)	0.0001
BMI:Body Mass Index			

Table 2. Clinical and reproductive outcomes of local injection and systemic administration of MTX

	Local injection n:17	Systemic administration n:27	P value
Time for serum β -hCG remission (weeks)	6.17 \pm 1.55	8.11 \pm 2.0	0.001
Time for uterine mass disappearance (weeks)	10.47 \pm 4.14	13.40 \pm 4.44	0.002
Hospitalization time (days)	7.05 \pm 2.77	11.96 \pm 4.02	0.0001
Cost of treatment (\$)	281.133 \pm 112.123	551.134 \pm 131.792	0.76
Overall cure rate (%)	%100	%100	1
Clinical pregnancy rate	6/11(54.6%)	5/16(31.4%)	0.301
Interval from CSP to subsequent pregnancy (month)	12.16 \pm 2.85	14.2 \pm 3.89	0.344
Recurrans CSP rate	0/17(0%)	1/27(6.3%)	1
Live birth rate	4/11(%36.4)	3/17(18.8%)	0.438
CSP: Cesarean scar pregnancy			

[OP-068]

YKL-40 immunoreactivity in placenta creta

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YKL-40 is named human cartilage glycoprotein-39 and it is a kind of fibroblast growth factor. This protein was proposed to be a factor in the proliferation and differentiation of malignant cells, extracellular tissue remodeling, neovascularization, and the prevention of cancer cells apoptosis. In addition, it is also believed to stimulate the fibroblasts surrounding the tumor. The Objective of this study was to evaluate YKL-40 tissue expression in placenta creta and its possible correlation with the degree of placenta creta. A total of 35-placenta creta and 6 control cases were identified, of which 8 cases were placenta accreta, 12 increta and 15 percreta. YKL-40 staining was scored in tissue as weak (1), medium (2) and strong (3). The YKL-40 immunoreactivity intensity in percreta group was significantly higher (2.47 ± 0.74) when compared to the increta and accreta groups (1.33 ± 0.49 and 1.37 ± 0.52 , respectively; $p = 0.000$). YKL-40 immunoreactivity intensity was also positively correlated with creta ($r = 0.6$, $p = 0.000$), Depth of invasion ($r = 0.49$, $p = 0.003$) and Depth of invasion / full thickness ratio ($r = 0.58$, $p = 0.000$). In conclusion, this study has documented YKL-40 is strongly expressed in percreta and correlated with extravillous trophoblast invasion. These findings may provide benefit to enlighten pathophysiology of creta.

Keywords: Placenta creta, YKL-40, extravillous trophoblast

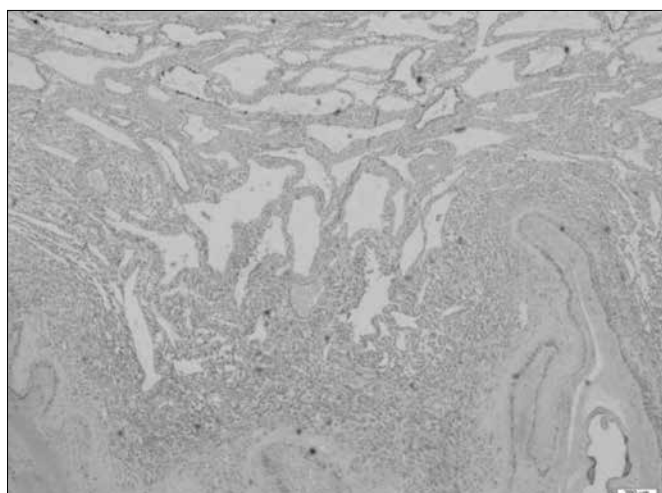


Figure 1. +1 intense staining pattern in a placenta accreta

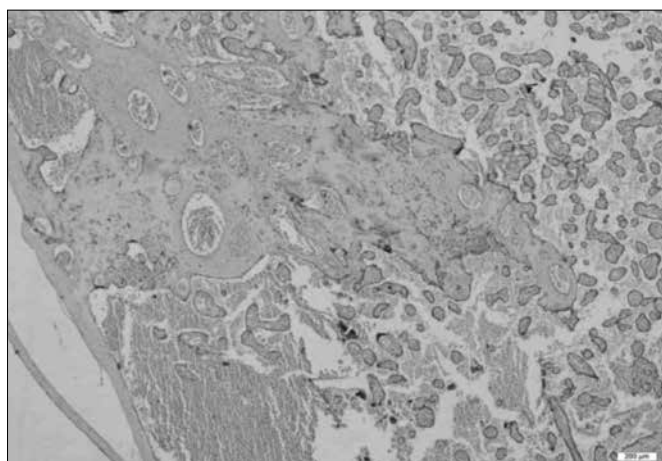


Figure 2. +3 intense staining pattern in a placenta percreta

[OP-069]

MR pelvimetry in women with sickle cell anemia and sickle cell trait

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Objective: The cesarean delivery rate tends to be higher in women with sickle cell anemia (SCA) and sickle cell trait (SCT) for various reasons. However, pelvic narrowing, which may lead to cesarean sections, has never before been studied in these groups. The aim of this study was to investigate magnetic resonance (MR) pelvimetry findings of women with SCA and SCT.

Material and Methods: We studied 66 women who underwent MR pelvimetry between March and June 2015 at our center. Our prospec-

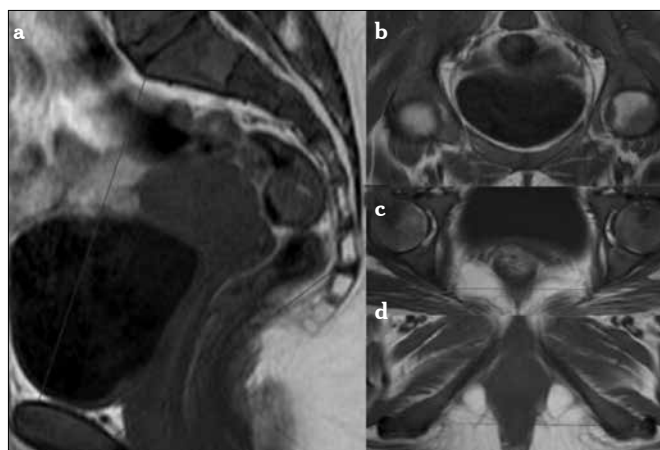


Figure 1. T1-weighted spin-echo MR pelvimetric images. Sagittal, mid-line section (a), show sagittal inlet (obstetric conjugate) and sagittal mid-pelvis distance. Oblique axial section (b), shows transverse inlet distance. Axial sections (c) and (d), show transverse mid-pelvis and transverse outlet diameters.

tive study included 21 women with SCA, 20 women with SCT, and 25 control women. Sagittal inlet, sagittal mid-pelvis, transverse inlet, transverse mid-pelvis, and transverse outlet diameters were measured. The mean diameters were compared with each other and with the control group.

Results: The mean ages of women with SCA, women with SCT, and control group women were 28.57, 30.25, and 28.36 years of age, respectively. The pelvimetric parameters did not show significant differences among groups including women with SCA, women with SCT, and control group women.

Conclusion: Our study demonstrated that the pelvic roofs of women with SCA and SCT are indistinguishable from healthy women. Thereby, maternal pelvic structures that impact delivery types may not be significantly changed by SCA and SCT diseases.

Keywords: Magnetic resonance; pelvimetry; sickle cell anemia; sickle cell trait; women

[OP-070]

How normal is 'normal'? validation of normal 75g OGTT results by neonatal outcomes

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Objective: The study was performed to investigate the impact of different 75g OGTT (oral glucose tolerance test) target ranges within normal limits on neonatal outcomes and thereby to determine the validity of 75g OGTT thresholds.

Material and Methods: For this observational study, 110 pregnant women, at 24-28 weeks of gestation, who attended our outpatient

Table 1. Neonatal outcomes of groups according to different 75g-OGTT 1h ranges within normal limits

	Group 1 N=50	Group 2 N=32	Group 3 N=18	Group 4 N=10	P
OGTT 1-h cut-off (mg/dL)	<120	(120-139)	(140-159)	(160-180)	
Neonatal hypoglycemia	5 (10)	1 (3.1)	0 (0)	0 (0)	0.266
Neonatal hyperbilirubinemia	13 (26)	13 (40.6)	7 (38.9)	2 (20)	0.394
NICU admission	7 (14)	5 (15.6)	3 (16.7)	3 (30)	0.665
SGA	8 (16)	11 (34.4)	1 (5.6)	0 (0)	0.019a,b
LGA	5 (10)	5 (15.6)	2 (11.1)	1 (10)	0.886
Birth Weight (g)	3296.9±527.5	3305.1±592.5	3316.9±659.1	3653.5±348	0.313
Abnormal Result	23 (46)	23 (71.9)	9 (50)	4 (40)	0.098

Values are expressed as Mean±SD or N (%). OGTT: oral glucose tolerance test, NICU: neonatal intensive care unit, SGA: small for gestational age, LGA: large for gestational age. a:group 2 vs group 3 p<0.05 b:group 2vs group 4 p<0.05

Table 2. Neonatal outcomes of groups according to different 75g-OGTT 2h ranges within normal limits

	Group 1 N=82	Group 2 N=14	Group 3 N=10	Group 4 N=4	P
OGTT 2-h cut-off (mg/dl)	<120	(120-134)	(135-149)	(150-153)	
Neonatal hypoglycemia	3 (3.7)	2 (14.3)	0 (0)	1 (25)	0.104
Neonatal hyperbilirubinemia	26 (31.7)	6 (42.9)	2 (20)	1 (25)	0.678
NICU admission	13 (15.9)	3 (21.4)	2 (20)	0 (0)	0.763
SGA	14 (17.1)	5 (35.7)	1 (10)	0 (0)	0.231
LGA	10 (12.2)	1 (7.1)	1 (10)	1 (25)	0.800
Birth Weight (g)	3328±555.8	3141.7±642	3532.5±409	3660±544.2	0.234
Abnormal Result	43 (52.4)	11 (78.6)	4 (40)	1 (25)	0.132

Values are expressed as Mean±SD or N (%). OGTT: oral glucose tolerance test, NICU: neonatal intensive care unit, SGA: small for gestational age, LGA: large for gestational age

antenatal clinic and diagnosed to have no GDM (gestational diabetes mellitus) by using 75g OGTT were enrolled after obtaining written informed consent from all participants. The diagnosis of the GDM was made according to the IADPSG/ADA (International Association of the Diabetes and Pregnancy Study Groups/ American Diabetes Association) criteria, when any of the following plasma glucose values are exceeded: fasting ≥ 92 mg/dl, 1h: ≥ 180 mg/dl, 2h: 153 mg/dl. The exclusion criteria included women with GDM, pre-gestational DM, hypertension, multiple pregnancies and fetal anomalies.

The normal 1-hour and 2-hour ranges of 75 gr OGTT were further divided into four different sub-groups; for the 1-hour as group 1 (< 120 mg/dl), group 2 (120-139 mg/dl), group 3 (140-159 mg/dl) and group 4 (160-180 mg/dl) and for the 2-hour as group 1 (< 120 mg/dl), group 2 (120-134 mg/dl), group 3 (135-149 mg/dl) and group 4 (150-153mg/dl). Neonatal outcomes were compared between these new range groups. All data were analyzed using Statistical Package for Social Sciences (SPSS) for Windows, Version 22 (IBM Corp, Armonk, NY) and p values <0.05 were considered to be statistically significant. Continuous variables are presented as mean±SD and categorical variables as numbers and percentages. For the analysis of qualitative data, chi-square test was used. For the analysis of quantitative data, one-way ANOVA (posthoc Tukey) and Kruskal Wallis tests were used.

Results: The number and percentage of the subjects were 50 (45.5 %), 32 (29.1%), 18 (16.4%) and 10 (9.1) for the first hour and 82 (74.5 %), 14 (12.7%), 10 (9.1 %), and 4 (3.6%) for the second hour, for groups 1-4, respectively.

For the 1 hour results, there was no statistically significant difference between groups in terms of neonatal hypoglycemia, hyperbilirubinemia, intensive care unit admission, birth weight, abnormal result

and LGA (large for gestational age) rates; however, the rate of SGA (small for gestational age) infants was statistically significantly higher in group 2 compared to those in groups 3 and 4. As for the 2 hour statistically similar results were found between the groups (p> 0.05).

Conclusion: In conclusion, this study demonstrates 75g OGTT (IADPSG/ADA) has reliable threshold values for GDM screening as the neonatal outcomes do not differ between the low normal and high normal levels of the first and second hour test results and provides evidence that there are still adverse neonatal outcomes in women with OGTT results below the current thresholds and the study also reports a higher number of SGA in the glucose range 120-139 mg/dl of the first hour which needs further evaluation. As a result, the validity of the 75g OGTT thresholds still needs to be investigated and verification by large studies is needed.

Keywords: Gestational diabetes mellitus, glucose tolerance test, neonatal outcome

[OP-071]

Serum and placental levels of milk fat globul epidermal growth factor-8, osteoprotegerin and suppressor of cytokine signaling-3receptorin pregnant women with preeclampsia, and their relation with severity of disease

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Objective: Preeclampsia is a specific disease and closely associated with systemic inflammatory response. The aim of this study is to research the possible role of some inflammatory factors and the inflammation controlling factor in the etiology of preeclampsia or reflection of this situation on placental tissue. Three parameters were included in the study regarded as potential risk factors: Milk Fat Globul Epidermal Growth Factor-8 (MFG-8); is an endometrial epithelial protein and regulates inflammation and apoptosis. MFG-8 is important in the development of endometrium and chorionic villus. Osteoprotegerin (OPG); is a pro-angiogenic factor and important for placental angiogenesis. Suppressor of cytokine signaling-3 Receptor (SOCS-3) plays role on prevention of the inflammation.

Material and Methods: The study population was consisted of 40 preeclamptic pregnant and 50 healthy, gestational-age matched pregnant with no history of preeclampsia (control group). Prepartum serum samples and postpartum placental tissue samples were used as materials. We analysed serum OPG, MFG-8 and SOCS-3 levels and placental MFG-8 and SOCS-3 levels with ELISA (Enzyme-Linked Immuno Sorbent Analysis) method and findings were evaluated comparatively.

Results: The mean age and body mass index of all women in the study were 28.2±6 years and 26.6±3.4 kg/m² respectively. Delivery week, birth weight and apgar1 score were statistically lower in preeclamptic group compared to those in control group. In preeclamptic group, serum OPG levels raised and showed statistically significant difference with respect to control group (p<0.01). There was no significant difference between groups for serum levels of MFG-8 and SOCS-3. Placental MFG-8 levels were significantly low in preeclamptic group compared to control group and there was no significant difference between groups for placental levels of SOCS-3. Serum MFG-8 levels showed positive correlation with both of blood pressure (R= 0.23, p=0.03) and proteinuria severity (R= 0.29, p<0.01). In regression analysis, only serum MFG-8 levels showed influence on blood pressure (OR=0.3, 95%CI= 0.001- 0.005, p<0.01) and this influence was minimal. Serum MFG-8 levels showed negative correlation with both of apgar1 score (R=0.24, p=0.02) and birth weight (R=0.25, p=0.01). serum MFG-8 levels showed minimal influence on birth weight (OR=0.24, 95%CI= 0.009- 0.09, p=0.02).

Conclusion: We observed significantly decreased placental MFG-8 and increased serum OPG levels in preeclamptic pregnant compared to controls. And serum MFG-8 levels showed influence on blood pressure and birth weight. Our results must be discussed with further studies.

Keywords: MFG-8, preeclampsia, OPG, SOCS-3

OP-072]

What is the ideal cutoff in screening for gestational diabetes mellitus in twin pregnancies

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Objective: The objective of this study was to determine the ideal cut-off in plasma glucose levels in screening for gestational diabetes mellitus (GDM) in twin pregnancies.

Material and Methods: In this retrospective study, a total 311 twin pregnancies were identified from hospital database from 2007 to 2016. A 50 gram oral glucose challenge test (GCT) was performed at 24–28 weeks' gestation. In those with a GCT of ≥ 130 mg/dL underwent a 3-hour, 100-g oral glucose tolerance test (GTT). The diagnosis of GDM was made if 2 of the 4 values on the oral glucose tolerance test were abnormal (Carpenter and Coustan). The screening results of the GCT was evaluated with ROC curve analysis to obtain a complete sensitivity/specificity at different cut-off points. We excluded all patients with pre-gestational diabetes and GDM diagnosed before 24 weeks of gestation.

Results: A total 311 patients with twin pregnancies underwent a GCT between 24-28 weeks. The positive screen rate was 32.5%. The incidence of GDM was 7.1%. The ROC analysis showed that a GCT cutoff of > 135 mg/dL maintained 100% sensitivity, with a specificity of 78.2%. The positive predictive value was 22.9% and the negative predictive value was 100%. Area under ROC curve (AUC) was 0.948. Compared to a cutoff of ≥ 130 mg/dL, a cutoff of > 135 mg/dL resulted in 5.1% less patients testing positive while maintaining the same 100% sensitivity.

Conclusion: In twin pregnancies screening, a 50 gram GCT cutoff appears to be > 135 mg/dL.

Keywords: Twin pregnancy, gestational diabetes mellitus, screening

[OP-073]

Evaluation of preeclampsia severity by examining the placenta with acoustic radiation force impulse elastography

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Objective: We aimed to detect the contribution of the measurement of placental shear wave velocity (SWV) by acoustic radiation force impulse (ARFI) imaging to the diagnosis of preeclampsia and to de-



Figure 1. The ROI (box) was placed at the center of the anterior placenta in preeclampsia. The placental elasticity value was 1.50 m/s

Table 1. Comparison of the preeclampsia group and the control group with the Mann-Whitney U test

Parameters	Patients Group	Control Group	p
Age (year)	32.3±6 (19-43)	31.9±6 (20-47)	0.7
SWVmin (m/s)	1.00±0.10 (0.83-1.32)	0.74±0.1 (0.50-1.12)	< 0.01
SWVmax (m/s)	1.88±0.25 (1.45-2.53)	1.5±0.47 (1.08-2.10)	< 0.01
SWVmean (m/s)	1.42±0.10 (1.29-1.62)	1.09±0.16 (0.80-1.75)	< 0.01
UmbRI [(systolic - diastolic)/systolic]	0.94±0.16(0.73-1.53)	0.66±0.07 (0.43-0.78)	< 0.01
UmbPI [(systolic - diastolic)/mean]	1.12±0.23(0.77-1.80)	0.83±0.15(0.61-1.30)	< 0.01
UtrI [(systolic - diastolic)/systolic]	0.83±0.11(0.69-1.17)	0.58±0.17 (0.35-1.16)	< 0.01
UtrPI [(systolic - diastolic)/mean]	0.99±0.32 (0.49-1.76)	0.80±0.21 (0.45-1.29)	< 0.01
Gestational Age (week)	30.8±4 (23-36)	30.5±4 (23-37)	0.7
Pl.Thickness (mm)	38.6±4 (27-47)	40.3±5 (29-49)	0.1

Values were described as mean ± SD, Pl.thickness:Placenta thickness, SWVmin:minimum shear wave velocity, SWVmax: maximum shear wave velocity, SWVmean: mean shear wave velocity, Umb.PI: umbilical pulsatile index, Umb.RI: umbilical resistivity index, Ute.PI: uterine pulsatile index, Ute.RI: uterine resistivity index.

termine the relationship between preeclampsia severity and SWV values.

Material and Methods: A total of 86 pregnant women were included in our study; 42 constituted the pregnant patient group with preeclampsia and 44 made up the healthy pregnant group. Based on revised American College of Obstetricians and Gynecologists criteria, the patient group was divided into two subgroups: severe preeclampsia and mild preeclampsia. Both groups were subjected to placental SWV values were measured by ARFI elastography.

Results: When SWVmin, SWVmax, and SWVmean values of the patient group with preeclampsia and the control group were compared, all values in the patient group were significantly higher than those of the control group. When SWV values of mild preeclampsia and severe preeclampsia subgroups were compared, SWVmin, SWVmax,

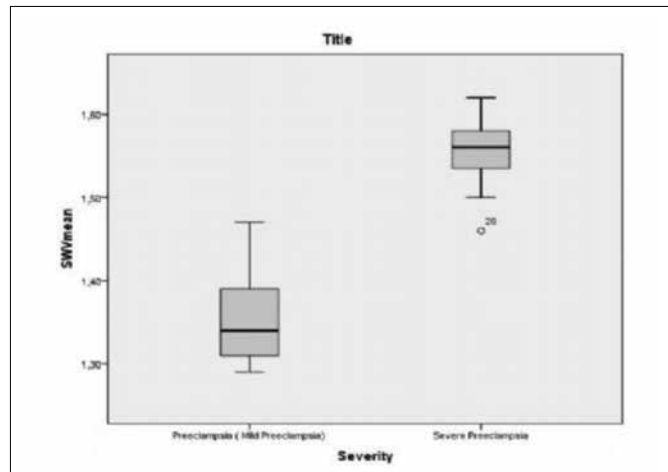


Figure 2. Comparison of mean renal shear wave velocity values between mild preeclampsia and severe preeclampsia

Table 2. Comparison of mild preeclampsia and severe preeclampsia groups, defined according to American College of Obstetricians and Gynecologists (ACOG) criteria, with the Mann-Whitney U test

Parameters	Mild preeclampsia	Severe Preeclampsia	p
Age (year)	32.2±6 (19-43)	32.6±6 (24-43)	0.9
SWVmin (m/s)	0.97±0.10 (0.83-1.32)	1.07±0.05 (0.95-1.17)	< 0.01
SWVmax (m/s)	1.77±0.17 (1.45-2.15)	2.11±0.23 (1.74-2.53)	< 0.01
SWVmean (m/s)	1.35±0.05 (1.29-1.47)	1.55±0.04 (1.46-1.62)	< 0.01
UmbRI[(systolic - diastolic)/systolic]	0.92±0.12 (0.77-1.33)	0.97±0.22 (0.73-1.53)	0.8
UmbPI[(systolic - diastolic)/mean]	1.14±0.21(0.77-1.45)	1.07±0.27(0.87-1.80)	0.1
UtrI[(systolic - diastolic)/systolic]	0.84±0.13(0.69-1.17)	0.81±0.06(0.72-0.96)	0.6
UtrPI[(systolic - diastolic)/mean]	1.00±0.24(0.64-1.48)	0.96±0.44(0.491.76)	0.5
Gestational Age (week)	31±4 (23-37)	30±4 (25-36)	0.4
Pl.Thickness (mm)	38.5±4	39±4	0.4

Values were described as mean ± SD, Pl.thickness:Placenta thickness, SWVmin:minimum shear wave velocity, SWVmax:maximum shear wave velocity, SWVmean:mean shear wave velocity, Umb.PI:umbilical pulsatile index, Umb.RI:umbilical resistivity index, Ute.PI:uterine pulsatile index, Ute.RI:uterine resistivity index.

and SWVmean values were significantly higher in the severe preeclampsia pregnant group.

Conclusion: Measuring placental SWV values with ARFI imaging is a useful method in the diagnosis and follow-up of preeclampsia. It can also be used as an additional method to detect the severity of preeclampsia.

Keywords: Preeclampsia, severe preeclampsia, ARFI elastography, placenta

[OP-074]

The prognostic value of first-trimester cystatin C levels for gestational complications

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Objective: This study is designed to evaluate predictive value of first-trimester cystatin C levels for long-term pregnancy complications.

Material and Methods: The cross-sectional study population consisted of patients who admitted to outpatient clinic of a Maternity Hospital between September 2013 and December 2014. Among the 203 participants who accepted to participate in the study, 174 subjects who continued antenatal follow-up in the same clinic were included in the final analyses. Cystatin C, blood urea nitrogen, Creatinine levels and estimated glomerular filtration rates were evaluated in the first-trimester routine antenatal visit. Mode of delivery and gestational complications were noted.

Results: First-trimester cystatin C levels were significantly higher in cases complicated with preterm delivery and premature rupture of membrane (PROM) compared to uncomplicated ones (0.58 ± 0.07 vs. 0.55 ± 0.07 , $P=0.041$, and 0.58 ± 0.07 vs. 0.55 ± 0.07 , $P=0.036$). With a cutoff value of 0.505 mg/L, sensitivity of cystatin C for preterm delivery and PROM was 91.9% and specificity was 27.7% with a negative predictive value of 92.3% and a positive predictive value of 26.6%.

Conclusion: Detection of cystatin C levels in the first trimester of pregnancy for the prediction of preterm/PROM seems as a promising preliminary data. The relatively higher first-trimester cystatin C levels in complicated pregnancies are conspicuous. The results imply that in pregnancy cystatin C might be more than a marker for renal function

Keywords: Complication, cystatin C, pregnancy

[OP-075]

Local resection may be a strong alternative to cesarean hysterectomy in conservative surgical management of placenta percreta

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Objective: To evaluate and describe a surgical approach for uterine preservation and management of postpartum hemorrhage in placenta percreta.

Material and Methods: We analyzed the data of patients who were diagnosed with placenta percreta prenatally and subsequently underwent cesarean section in which local resection technique was used to manage postpartum hemorrhage and uterine preservation at our tertiary care center between 2013 and 2016. The details of this surgical approach were as follows: The surgical team was formed of at least



Figure 1. a-c. (a) shows the vertical fundal incision to deliver the baby. (b) shows the second step of surgery to ligate the bilateral anterior division of internal iliac artery. (c) shows the resection of local portion of uterus that is invaded by the placenta seen as a bulging mass with overlying dilated vessels.

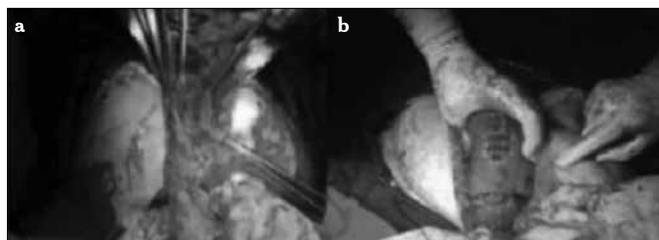


Figure 2. a, b. (a) shows the new uterine edges (upper portion grasped with two fingers and lower portion grasped with ovary clamps). (b) shows the final view of sutured fundal and transvers uterine incisions.

Table 1. Shows the demographic and clinical data of the studied group

Variable	Mean \pm SD	Number (%)	P value
Number of cases, total		12 (%)	
Local resection with uterine preservation	8/12 (66.6%)		
Age, years	29.5 \pm 3.7		
Gravidity	4.2 \pm 1.6		
Parity	3.32 \pm 1.92		
Gestational age at delivery, weeks	35.1 \pm 3.4		
Previous cesarean sections (c/s)			
One c/s		4 (50%)	
Two c/s		2 (25%)	
Three c/s		2 (25%)	
Presence of placenta previa			
Predominating anteriorly		7 (87.5%)	
Predominating posteriorly		1 (12.5%)	
Complication			
Bladder injury		1 (12.5%)	
Number of blood transfusions, unit	4.8 \pm 2.6		
Length of hospital stay, days	3.5 \pm 0.4		
Mean preoperative Hb level, mg/dl	11.2 \pm 0.32		0.01
Mean postoperative Hb level, mg/dl	9.4 \pm 0.42		0.01
Duration of operation, minutes	120 \pm 25.6		
Diagnostic tools used			
Doppler ultrasound		12/12 (100%)	
Magnetic resonance imaging		6/12 (50%)	

two expert obstetricians one of whom was a gynecologic oncologist, familiar with pelvic vascular anatomy, two assistants, an anesthesiologist, and a pediatrician. The first step of the operation commenced with

a vertical midline incision under spinal/epidural anesthesia followed by the vertical fundal incision and delivery of the fetus. Then, the placenta was clamped inside the uterus, leaving it in place, and no attempt was made to remove it. The anesthesia was then converted to general anesthesia (Figure 1A). The routine second step, in all patients, was the bilateral ligation of the anterior division of the internal iliac artery (Figure 1B). The third step included the sharp or blunt dissection of the bladder in the uterovesical space and ligation of the perforating vessels from the placenta to the bladder serosa, separately if required. The fourth step included the local (partial) resection of the uterine segment involving the placenta percreta invasion site and if needed, hemostatic sutures to the bleeding sites, particularly in the posterior uterine wall (figure 1C). The fifth step was to apply the Bakri balloon tamponade (Cook Women's Health, Spencer, IN, USA), zooming and suturing the new uterine edges horizontally and closing the fundal incision vertically (Figure 2A and 2B). The appropriate crystalloid infusion, colloids, blood products according to the clinical circumstances, and oxytocin 30 UI i.v. infusion, and methyl ergobasine 0.2mg i.v. in single dose were administered immediately following the resection of the uterine portion.

Results: The technique of local resection described above was successful in preserving the uterus and stopping the bleeding in 8 out of 12 cases. The diagnosis of placenta percreta in all cases were confirmed intra-operatively and postoperatively by histological examinations (Table 1). Four cases were resorted to hysterectomy. The mean number of transfused erythrocyte suspension was 4.8 ± 2.6 . One complication of bladder injury was encountered in which treated conservatively.

Conclusion: Placenta percreta is a life threatening condition and leads to increased maternal mortality and morbidity. Conservative approaches and uterine preservation are preferred to radical surgery, which leads to loss of fertility and increases blood loss and perioperative complications. Local resection of percreta site is an effective, safe and fertility preserving approach that can be applied to manage the postpartum hemorrhage and preservation of uterus in patients with placenta percreta.

Keywords: Placenta percreta, uterine preservation, placenta previa, local resection, maternal morbidity

[OP-076]

Insulin resistance is associated with adverse maternal and fetal health outcome in non-GDM pregnant

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Objective: The aims of this study was to evaluate the risk of adverse maternal and fetal health outcomes in non-GDM pregnant women with one abnormal glucose tolerance test result.

Material and Methods: In this retrospective study, a total of 2982 pregnant women, underwent a 50g glucose challenge test (GCT) at 24 to 28 weeks of gestation, was selected from Balıkesir State Hospital database between January 2013 and January 2014. Subjects were divided four groups according to GCT and glucose tolerance test (GTT) results. Group I, control subject, had a normal GCT, Group II, screen positive GCT, had an elevated GCT with normal glucose tolerance test (NGT), Group III, abnormal GTT, had an elevated GCT with one abnormal value on GTT and Group IV, gestational diabetes mellitus (GDM)

had an elevated GCT with two or more abnormal value on GTT. A GCT cutoff of ≥ 140 mg/dl was selected. Women with an elevated GCT undergo prompt diagnostic testing with a 3-hour GTT. GDM is diagnosed by having two or more abnormal values using Carpenter-Coustan (CC) criteria (fasting ≥ 95 mg/dL, 1-hour ≥ 180 mg/dL, 2-hour ≥ 155 mg/dL, and 3-hour ≥ 140 mg/dL). Maternal and fetal outcomes were compared between the groups. Pregnants who do not have GDM on diagnostic testing return to routine prenatal care.

Results: A total of 2982 pregnant women were screened with a 1-h 50gr GCT and divided four groups according to GCT and GTT results. With increasing plasma glucose values, there was a significant increase in the rate of cesarean section, fetal macrosomia, preeclampsia and neonatal hypoglycaemia.

Conclusion: Positive GCT screening and one abnormal GTT value associated with adverse fetal and maternal health outcome even in the absence of GDM.

Keywords: Gestational diabetes mellitus, oral glucose tolerance test, fetal macrosomia

[OP-077]

Agents used for cervical ripening: a cost effectiveness analysis among patients of high risk pregnancy in a teaching hospital

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Objective: To compare the cost effectiveness of cervical ripening agents (CRA) in women with high risk pregnancies.

Material and Methods: This retrospective analysis included 788 high risk pregnancies for whom CRA were administered in the perinatology intensive care unit of Etlik Zübeyde Hanim Women's Health Training and Research Hospital between January 1 and December 31, 2015. Three methods of cervical ripening were compared for achievement of vaginal birth rates and Social Security Administration (SSA) payments. The SSA payment for vaginal birth, cesarean section, balloon catheter and dinoprostone were: 440, 495, 360 and 74 Turkish liras (TL); respectively.

Results: There were 645, 129 and 14 pregnant women in Dinoprostone, Balloon catheter, and Foley catheter groups with vaginal birth rates of 67%, 76% and 72%, respectively. Cost per single CRA was highest for the balloon catheter and lowest for the foley catheter. For dinoprostone to be cost effective with this rate of vaginal birth (almost 2 in 3) the cost should be less than 36.6 TL (3 dinoprostone needed to prevent 2 cesarean births which equals to extra 110 TL) For balloon catheter to be cost effective with this rate of vaginal birth (almost 3 in 4) the cost should be less than 41.2 TL (4 balloon catheters needed to prevent 3 cesarean births which equals to extra 165 TL). The cost for Foley catheter is negligible.

Conclusion: In the cost effective analysis of CRA, Foley catheter resulted a similar vaginal birth rate compared to the other two agents with a negligible cost.

Keywords: Cervical ripening agents, dinoprostone, cost effective analysis

Table 1. The costs and birth rates of cervical ripening agents administered to high risk pregnancies in year 2015

CRA	Cost of a single dose (TL)	Cost. of total cases for cervical ripening agent (TL)	Vaginal birth N (%)	Cesarean birth N (%)	Total cost (TL)	If all were cesarean births without CRA administration (TL)
Dinoprostone (n=645)	74	47730	432 (67)	213 (33)	343245	319275
Cook balloon (n=129)	360	46440	98 (76)	31 (24)	104905	63855
Foley catheter (n=14)	0	0	10 (72)	4 (28)	6380	6930

[OP-079]

Low primary cesarean delivery rates of a secondary health center in a seven year period

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Objective: To present the indications and primary caesarean section (CS) rates of a secondary level hospital.

Material and Methods: This is a retrospective review of the births recorded at a secondary health center between March 2009 and December 2015. The number of patients with primary CS and repeat CS, total number of births, caesarean indications and complications were assessed.

Results: A total of 6535 live births were recorded during a seven-year-long study period. The mean age of the patients was determined as 26.7 ± 6.0 years (range of age: 15-47 years). Delivery by CS was performed in 20.5% of the total births. Of the cesarean births, 27.8% were primary CS and 72.2% were repeat CS. The mean primary and repeat CS rates during the study period were calculated as 5.7% and 14.8% respectively. The primary CS rate was 8.8% in 2009 and this number decreased to 4.3% in 2015. The most frequently encountered primary CS indications were malpresentation (33.9%) followed by fetal distress (23.3%) and failure of labor induction (14.8%) respectively. No intestinal injury was determined in any patient who underwent cesarean delivery. In the repeat CS group, only one patient had bladder injury which was successfully repaired.

Conclusion: The rates of primary caesarean section determined in this study are very low. These low rates can be attributed to the several factors such as informing and encouraging patients about vaginal birth, avoiding CS on maternal request and applying amniotic membrane stripping at term pregnancies.

Keywords: Caesarean section, caesarean section indications, rate of primary caesarean section

[OP-080]

How does gelatin sponge affect postoperative morbidity of women delivering by cesarean section?

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Objective: To determine the effect of the use of local haemostatic gelatin sponge on postoperative morbidity in patients undergoing caesarean section (CS).

Material and Methods: The records of 130 patients who underwent CS surgery were retrospectively evaluated. Group 1 comprised 65 patients in whom gelatin sponge (GS) applied. Group 2 comprised 65 patients who did not receive GS. Time to first flatus, nausea and vomiting, requirement for antiemetic drugs, development of postoperative ileus, and hospitalisation duration were compared between groups.

Results: No significant difference in mean age, gravida, parity, or BMI was observed between the 2 groups. No significant difference in the number of patients with abdominal adhesions, or nausea and vomiting was observed. A statistically significant difference in the time to first flatus was observed between groups (Group 1, 28.21 ± 8.29 hours; Group 2, 12.89 ± 4.85 hours; $P < 0.001$). Hospitalisation durations were significantly longer in Group 2 (Group 1, 49.73 ± 12.67 hours; Group 2, 41.33 ± 2.62 hours; $P = 0.004$). No significant differences in postoperative ileus, the use of antiemetic medication, or febrile morbidity were observed between groups.

Conclusion: The utility of GS in patients undergoing CS may be limited by associated increases in time to first flatus and hospitalisation duration postoperatively.

Keywords: Caesarean section, gelatin sponge, time to the first flatus

[OP-081]

Prophylactic hypogastric artery ligation in surgery for placental invasion disorders

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Objective: To determine the effectiveness of prophylactic hypogastric artery ligation (HAL) on the bleeding control in surgeries of placental invasion anomalies.

Material and Methods: In this study, an evaluation was made of the effects on bleeding of prophylactic HAL applied before hysterectomy in

Table 1. The operative outcomes of both groups

	Group 1 Hysterectomy (n=19)	Group 2 HAL+ Hysterectomy (n= 26)	p value
Duration of operation (minutes)	103.3±24.9	112.7±23.2	0.340
Estimated blood loss (mL)	3183±429	2204±445	0.001
Fluid drainage (mL)	2346±1169	700±411	0.001
Red cells transfused (units)	5.8±1.8	3.3±0.8	0.001
FFP transfused (units)	3.9±0.8	2.5±0.8	0.001
Thrombocyte level (K/uL)	134±34	145±10	0.246
INR	1.1±0.1	1.0±0.1	0.059
Hospitalization days	5.0±1.0	4.3±0.5	0.118
Thrombocytes transfused (units)	0.2±0.4	-	0.068
Complications			
• Bladder perforation	8 (42%)	10 (38%)	
• Ureteral injury	0	0	
• Postoperative fever	6 (31%)	7 (27%)	
• Maternal mortality	0	0	
• Re-operation	0	0	
Total	14	17	0.396
HAL: Hypogastric artery ligation, FFP: Fresh frozen plasma, INR: International normalized ratio			

cases of placental invasion anomalies. A total of 45 pregnant patients with placental invasion anomalies were examined retrospectively. In Group 1 (n=19) hysterectomy alone was applied in the surgical treatment and in Group 2 (n=26), prophylactic HAL was applied before hysterectomy. The results were compared with evaluation of morbidities, particularly bleeding.

Results: Statistically significantly higher values were determined in Group 1 compared to Group 2 in respect of estimated blood loss (3183 vs 2204 ml, $p < 0.001$) amount of fluid drainage (2346 vs 700 ml, $p < 0.001$), and mean units of packed red cells and thrombocytes transfused (5.8 vs 3.3 units, $p < 0.001$ and 3.9 vs 2.5 units, $p < 0.001$ respectively). The hCO₃ level was statistically significantly lower in Group 1 (16.3 meq/L in Group 1, 19.2 meq/L in Group 2) ($p = 0.003$).

Conclusion: Prophylactic HAL has a protective effect on bleeding in operations of placental invasion anomalies and may be used in cases in which balloon occlusion of the hypogastric artery can not be performed.

Keywords: Hypogastric artery ligation, peripartum hysterectomy, haemorrhage

[OP-082]

Assessment of the cesarean scar pregnancies diagnosed in a tertiary health center in the last year

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Objective: To present demographic and clinical characteristics and management of cesarean scar pregnancies.

Material and Methods: A retrospective examination was made of cesarean scar pregnancies which were diagnosed and treated in the obstetrics and gynecology clinic at Sütçü İmam University Hospital, a tertiary health center between January and December 2015. The data regarding the demographic and clinical characteristics, ultrasonographic findings and treatment outcomes were obtained from the medical records.

Results: During the study period, six cases were diagnosed as cesarean scar pregnancy. Diagnostic method was transvaginal ultrasonograph in all of the cases. The mean age was 33.2 ± 3.3 years and mean gravida was 4.3 ± 1.5 . The mean gestational age at the time of diagnosis was determined as 6.9 ± 0.5 weeks. The mean number of previous cesarean sections was 2.2 ± 0.9 . In all of the cases, dilatation and curatage (D&C) was performed one week after the administration of a single dose methotrexate (1mg/kg) intramuscularly. The mean serum beta human chorionic gonadotropin level at the time of diagnosis was 21917.7 ± 14290.5 IU/mL. The mean serum hemoglobine level prior to methotrexate treatment and after D&C were determined as 11.9 ± 2.2 and 10.8 ± 1.9 g/dL respectively. There was no need for hysterectomy or for transfusion of blood and blood products in any of the cases. The rate of CSP among the ectopic pregnancies diagnosed during the study period was 5.4%

Conclusion: CSP may lead to uterine rupture and thereby maternal mortality due to delay in diagnosis. Early recognition has a vital role in reducing complications related with cesarean scar pregnancies. However there is no consensus on the diagnostic criteria and treatment modalities in cesarean scar pregnancies. In the current study, it was found that D&C performed one week after the administration of a single dose systemic methotrexate administration might be a successful treatment option for cesarean scar pregnancies. However the small sample size was the major limitation of this study.

Keywords: Cesarean scar pregnancy, dilatation and curatage, methotrexate

[OP-083]

Association between maternal vitamin D status in pregnant women and risk of gestational diabetes mellitus

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Objective: To investigate whether maternal serum levels of 25-hydroxyvitamin D [25(OH)D] in the first trimester is associated with an increased risk of gestational diabetes mellitus (GDM).

Material and Methods: We conducted a cross sectional study of a cohort in pregnant women who had undergone routine genetic multiple marker screen and subsequent glucose tolerance testing. Of the 23 women with GDM and 208 controls without GDM were included in this study. Plasma 25(OH)D concentrations were measured using liquid chromatography-tandem mass spectrometry.

Table 1. Maternal severe vitamin D deficiency at 11–14 and 24–28 weeks of gestation

	Women with gestational diabetes	Control subjects	p value
Severe vitamin D deficiency (25(OH)D level <10 ng/mL) measured at 11–14 weeks of gestation (visit 1), n (%)	11 (44%)	93 (44.7%)	0.9
Severe vitamin D deficiency (25(OH)D level <10 ng/mL) measured at 24–28 weeks of gestation (visit 2), n (%)	5 (33.3%)	63 (46.7)	0.3
$\Delta 25(\text{OH})\text{D}$ (V2–V1)	0.25±5.8	0.84±12.84	0.8

Results: Mean 25(OH)D concentrations at 11–14 weeks of gestation were not significantly different in women who subsequently developed GDM compared with those who did not (mean \pm SD: 13.96 \pm 9.05 versus 13.43 \pm 9.72, $p=0.8$). The prevalence of first-trimester severe 25(OH)D deficiency (<10 ng/mL) was similar in women with GDM and healthy controls (44% vs 44.7%, respectively; $p=0.9$). The mean concentrations of 25(OH)D slightly increased over the two gestational age windows both in women with GDM (mean $\Delta 25(\text{OH})\text{D}$: 0.25 \pm 5.8 ng/mL) and controls (mean $\Delta 25(\text{OH})\text{D}$: 0.84 \pm 12.84 ng/mL), but the difference was not statistically significant ($p=0.8$) (Table 1)

Conclusion: Vitamin D deficiency in early pregnancy is not significantly associated with elevated risk of GDM.

Keywords: Gestational diabetes mellitus, pregnancy, severe vitamin D deficiency

[OP-084]

Patients followed due to severe maternal morbidity and treatment results

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Objective: Maternal mortality statistics are used as a measurement of the quality of maternal health and maternity wards around the world. However, maternal mortality rates decreased consistently in developed countries in the last two centuries, and severe maternal morbidity or near-miss patient rates were claimed to be more practical indicators than mortality rates in displaying the quality of obstetric treatment. In Turkey, there is no sufficient information in the medical literature related to severe Maternal Morbidity or near-miss patients and their results. In this study, it is aimed to evaluate the characteristics of the patients consulting our clinic that is the reference university hospital of Sakarya province with severe acute complications in pregnancy and taken to the intensive care unit due to severe obstetric morbidity and the treatment results.

Material and Methods: Pregnant and puerperal women consulting the Clinic of Maternity Health and Obstetrics of Sakarya University Training and Research Hospital between January 2014 - December 2015 and treated in the intensive care unit were included in this study, and their files were scanned retrospectively. Demographic characteristics of the

patients such as maternal age, previous obstetric and pregnancy history, and pregnancy age during admission from their discharge epicrisis from intensive care were recorded. Whether there was a patient followed in the service or transferred from another hospital, whether she was pregnant when she arrived in the intensive care unit, whether she gave birth, her mode of delivery, and neonatal results were recorded. The diagnosis during the stay in the intensive care unit, the length of intensive care unit stay, whether advanced life support attempts or interventions were implemented, hemodynamic data, transfusion amount, intraoperative complications in patients that had an operation, and maternal morbidity and mortality information were recorded.

Results: In a two-year period, 16728 hospital births, 68 near-miss cases and maternal death in two of these patients were observed in our clinic. The mean age of the patients ($n=68$) with severe obstetric morbidity was 28,48 \pm 5,94. While 73.5% of the patients ($n=50$) were sent to the hospital extrinsically, there were 18 cases (26.5%) in whom complications developed during their stay in the service. 58.8% of the near-miss cases ($n=40$) had severe hypertensive diseases, on the other hand, 35.3% of the cases ($n=24$) had obstetric complications that developed in regard to bleeding. While 40% of the cases ($n=16$) with hypertension had severe pre-eclampsia, 35% of the cases ($n=14$) had eclampsia, and 25% ($n=10$) had HELLP. No significant difference was identified between whether or not the cases that underwent blood product transfusion in intensive care were sent to our clinic, and the high transfusion rates of the referred patients are remarkably excessive ($p=0,088$; $p>0,05$).

Conclusion: The most important reasons for near-miss maternal morbidity are the complications related to obstetric bleeding and hypertensive diseases of pregnancy. In order to prevent the delays in interventions due to conveyor chain, it is necessary to diagnose the patients with a risk factor in terms of obstetric complications early, perform their antenatal follow-ups and births in tertiary centers.

Keywords: Maternal near-miss, obstetric complication, maternal death, maternal morbidity

[OP-085]

Thiol disulphides may be a marker to determine the degree of preeclampsia?

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Objective: The aim of this study was to investigate the relationship between serum thiol/disulphide homeostasis and severity of preeclampsia.

Material and Methods: Thirty-two pregnant women with severe preeclampsia and 30 pregnant women with mild preeclampsia and 37 healthy, uncomplicated pregnancies were included in this study. Native thiol (-SH), disulphide(-S-S) and Total thiol ((S-S)+(-SH)) concentrations were measured by a novel automated assay method. Furthermore, disulphide/total thiol percent ratios (S-S/-SH+S-S), disulphide/native thiol (S-S/-SH) percent ratios and native thiol/total thiol percent ratios (-SH/-

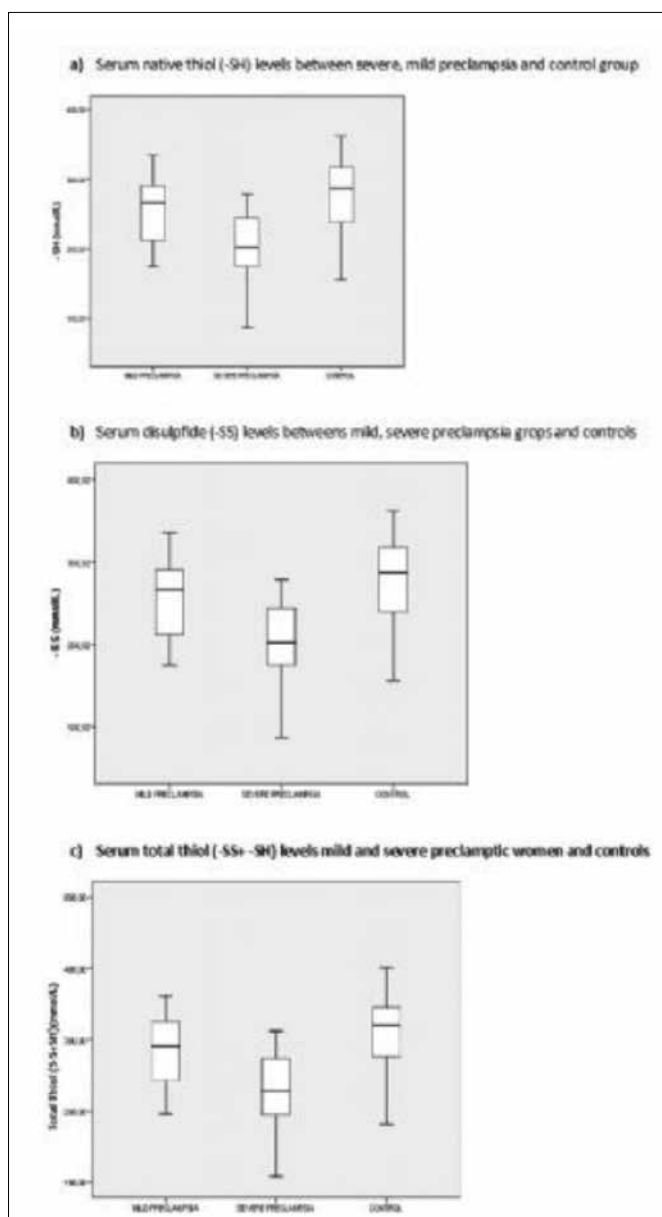


Figure 1. SH: curves of serum

SH+S-S) were calculated in all groups. In the ROC analysis performed for severe and mild Preeclampsia and Thiol/Disulphide Homeostasis, the sensitivity, specificity and cut-off values of Thiol/Disulphide were estimated, and the areas under the curve were calculated.

Results: The serum native and total thiol levels were significantly lower in severe preeclampsia when compared with the mild preeclampsia and control groups ($p < 0.001$). Disulphide (S-S) levels were significantly lower in severe and mild preeclampsia group compared with the control group ($p < 0.01$). When the ROC analysis between groups is performed separately, a statistically significant relation was detected between the presence of severe preeclampsia and 275,9 cut-off value of Native Thiol level ($p = 0.001$; $p < 0.01$). It can be said that the risk of preeclampsia incidence in cases with the Native Thiol level of 275,9 and below is 50,93 times higher. The ODDS rate for Native Thiol is 50,929 (%95 CI: 6,241-415,573)(Figure 2).

Conclusion: Thiols are the greatest antioxidants of serum components. The results of this study suggest that severe preeclampsia might be characterized by different levels of thiol hemostasis. Serum thiol/disulphide homeostasis may have a role in the pathogenesis of preeclampsia.

Keywords: Mild Preeclampsia, Oxidative Damage, Severe Preeclampsia, Thiol/Disulphide Homeostasis.

Keywords: Mild Preeclampsia, oxidative damage, severe preeclampsia, thiol/disulphide homeostasis

[OP-086]

Obstetric relaparotomies

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Objective: Study on bleeding regions and characteristics of patients which were performed relaparotomy (RL) due to bleeding.

Material and Methods: A retrospective observational study about the obstetric patients treated between Jan 06 and July 15 due to bleeding in a tertiary care center was performed. Study includes patient had cesarean section (CS) (patients with previous CS, cephalopelvic disproportion (CPD)-breech presentation, placental abruption, preeclampsia-eclampsia and performed CS due to rupture diagnosis during normal delivery) and bleeding and patients with normal delivery that were performed operation due to atony or rupture and had bleeding afterwards. 124 patients performed RL were observed and 10 patients left out of the study (9 due to abscess and 1 due to placental retention). There were total of 21411 delivery, with 7713 of them normal delivery and 13698 of them CS.

Results: 114 patients were performed RL due to bleeding and the RL ratio is 0.532% (RL rate after CS 0.67%, RL rate after normal delivery 0.28%). 20 of patients had normal delivery and 94 of them had CS. The most

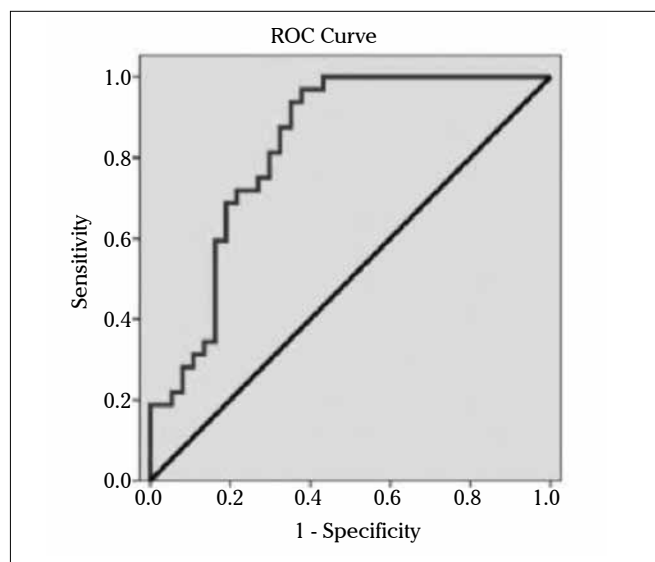


Figure 2.

common operations performed initially were CS in 82 cases (71.9%) and followed by 23 hysterectomies (20.2%) and rupture repair 9 (7.9%). RL indications were abdominal bleeding in 95 (83.4) cases and atony in 19 (16.7%). Performed procedures at RL were hysterectomy 45 (39.5%), secondary suture 25 (21.9%), vascular ligation 21 (18.4%), rectus muscle repair 16 (14%) and rupture repair 7 (6.1). Together with rectus muscle repair, 2 patients were performed secondary suture, 1 patient hysterectomy and 1 patient vascular ligation. In 9 patients were needed secondary RL and out of these; 2 patients were performed hysterectomy, 6 patients secondary suture and 1 patients uterine devascularization. Secondary RL risk observed as 7.89% and mortality rate 3.5% (4 patients). Out of these 4 patients; 3 of them were performed CS due to CPD-breech presentation and the other one due to placental abruption.

Conclusion: Most of the patients performed obstetric RL had previous CS, though natural delivery has the risk also. Most common bleeding region is uterus. For rectus muscle being among these regions is very important to have control over rectus muscle during the first operation.

Keywords: Relaparotomy, bleeding, rectus muscle

[OP-088]

Relationship between fetuin-A levels and recurrent miscarriage

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Objective: Whether recurrent miscarriage is associated with increased fetuin-A levels and serum fetuin-A can be proposed as a potential marker for identifying women at risk of pregnancy loss.

Design: Case-control study of 89 women.

Material and Methods: Serum fetuin-A concentrations were measured in 30 non-pregnant women with a history of unexplained recurrent miscarriage (Group I), 29 women who had history of unexplained recurrent miscarriage and were admitted to our clinic due to miscarriage during the study period (Group II) and 30 fertile women who have no history of miscarriage or any other pregnancy complications with at least two previous healthy children (Group III). The samples in the Group II were obtained within a short time after miscarriage. Serum fetuin-A levels of these three groups were assessed and compared.

Results: The median serum fetuin-A levels of Group I, II and III were 59.45, 62.73 and 44.52 respectively ($p=0.065$). More importantly, we detected a significant increase in serum fetuin-A levels in group II compared to group III ($p=0.011$). No significant differences in the levels of fetuin-A of group I compared to either group II or group III ($p=0.433$ and 0.268 respectively).

Conclusion: Previous studies have reported an association between high concentrations of fetuin-A in cell media and decrease viability and invasiveness of human extravillous trophoblast (EVT) cells. This is the first study evaluating the association between serum fetuin-A levels and recurrent miscarriage. Our results showed that serum fetuin-A levels were significantly increased in women with a history of recurrent miscarriage and were experiencing pregnancy loss compared to both fertile women and non-pregnant women with a history of recurrent miscarriage. These results demonstrate that high fetuin-A levels may be one of the factors related to pregnancy loss which may be informative for future studies. This small sized case control study can

only demonstrate association not a cause effect relationship. Further studies with large population size are required to investigate whether fetuin-A can be used for identifying women at risk of miscarriage.

Keywords: Fetuin-A, recurrent pregnancy loss

[OP-089]

Emergency peripartum hysterectomy: a 10-year experience at a single center

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Objective: The objective of our study is to determine incidence, risk factors, indications, outcomes, and complications of emergency peripartum hysterectomy (EPH) retrospectively performed in our university hospital.

Material and Methods: This retrospective study includes 54 cases of EPH performed at the department of obstetrics and gynecology of Gaziantep University Hospital between the years 2005–2015. We included all hysterectomy cases of uncontrolled uterine bleeding unresponsive to medical measures during the first 24 hours after the 20 weeks of gestation. Age, gravidity, parity, body mass index (BMI), history of previous cesarean delivery (CS), mode of delivery were maternal characteristics. Indication of hysterectomy, type of hyster-

Table 1. Maternal characteristics and perinatal outcomes of EPH

Age [†]	32.39 (18-43)
BMI [†]	27.56 (24.5-31.3)
Gestational week [†]	36.02 (22-40)
Previous caesarean*	
<=2	15 (33.3)
>=3	30 (66.6)
Hysterectomy*	
Total	47 (87)
Subtotal	7 (13)
Apgar score (1 minute) [†]	8.2 (2-9)
Apgar score (5 minute) [†]	9.4 (3-10)
Blood products [†]	4.1 (1-8)
Erythrocyte Fresh frozen plasma Apheresis	3.2
Operation time (minute) [†]	71.91 (40-120)
Neonatal death*	6 (11.1)
Maternal death*	1 (1.9)
Mode of delivery*	
Vaginal delivery	9 (16.6)
Caesarean	45 (83.4)
[†] Mean (min-max) *n (%)	

ectomy, need for blood transfusion, need for bilateral internal iliac artery ligation, postoperative complications, postoperative hospital stay, intensive care unit (ICU) admission rate and neonatal outcomes were analyzed. (Table 1) We compared the most common indications of EPH between each other.

Results: In a ten-year period, 8922 deliveries took place which consist of 6726 vaginal deliveries and 2196 cesarean sections. There were 54 EPH out of 8922 deliveries with an incidence of 6 per 1,000 deliveries during the study period. Forty-five EPHs were performed after cesarean delivery and nine after vaginal delivery. The most common indications were abnormal placentation (74.0 %), followed by uterine

Table 2. Maternal demographics and complications with respect to the indication of EPH

Maternal characteristics	Abnormal Placentation n=40	Uterine atony, rupture n=14	P
Age [†]	32.5 (4)	31.8 (6.3)	0.905
Gravidity [†]	4.6 (1.7)	4.8 (3.1)	0.805
Parity [†]	3.03 (3)	3.07 (3)	0.559
BMI (kg/m ²) [†]	27.6 (1.5)	27.4 (1.2)	0.767
Previous caesarean section	40 (88.8)	5 (11.2)	
< =2	14 (35)	3 (60)	
> =3	26 (65)	2 (40)	
Gestational week [†]	36.5 (3.3)	34.5 (6.6)	0.800
Operation time(minute) [†]	72.2 (14.5)	70.8 (11.3)	0.713
Hysterectomy*	40	14	
Total	39 (97.5)	8 (57.1)	
Subtotal	1 (2.5) 14	6 (42.9)	
Neonatal death*	2 (5)	4 (28.6)	0.025
Bilateral hypogastric artery ligation*	3 (7.5)	5 (35.7)	0.017
ICU admission*	20 (50)	7 (50)	1
Blood Transfusion*	40	14	
Erythrocyte	3.9 (1.9)	4.3 (2.2)	
Fresh frozen plasma	3.2 (1.7)	3.1 (1.7)	0.570
Apheresis	7	2	0.652
1Ü	3 (7.5)	2 (14.3)	0.095
2Ü	4 (10)	-	
Delivery in another hospital*	3 (7.5)	5 (35.7)	0.017
Complications*	17 (42.5)	1 (7.1)	0.037
Urinary tract injury	10 (25)	1 (7.1)	0.252
DIC	3 (7.5)	6 (42.9)	0.006
Others (pelvic hematoma leading to relaparotomy, respiratory arrest, acute renal failure-dialysis, sepsis, hyperglycaemia, wound infection)			
[†] Mean (SD) * n (%)			

atony (18.6%), and uterine rupture (7.4%). Thirty-five percent of patients who underwent EPH with abnormal placentation had at least two previous CS. Forty-seven patients (87 %) underwent total hysterectomy, and the most frequent indication was abnormal placentation (82.9%). The remaining 7 patients underwent subtotal hysterectomy (13%), and the most common indication was uterine atony (57.1 %). Maternal and perinatal mortalities were 1.9% and 11.1%, respectively. Urinary tract injury (33.4 %) was the most common intraoperative complication and disseminated intravascular coagulopathy (DIC) (20.4 %) was the most common postoperative complication. Bilateral hypogastric artery ligation, urinary tract injury, neonatal death and other complications (pelvic hematoma leading to relaparotomy, respiratory arrest, acute renal failure, sepsis, hyperglycaemia, wound infection) were significantly related with the type of EPH indication ($p < 0.05$). (Table 2)

Conclusion: Abnormal placentation was the most common indication for EPH, which required total hysterectomy in most of the cases. Previous CS can be suggested as a high risk factor for abnormal placentation. EPH remains related with a high incidence of morbidity. The delivery should be performed in appropriate clinical settings with experienced surgeons when high risk factors like abnormal placentations are determined preoperatively.

Keywords: Abnormal placentation, maternal morbidity, peripartum hysterectomy

[OP-090]

Placental vascularization and apoptosis in type-1 DM and gestational DM

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Objective: To analyze the alteration in vascularization and apoptosis of GDM and Type 1 DM patients' placenta.

Material and Methods: Placental samples drawn from normal (n=6), GDM (n=6) and Type 1 DM (n=6) pregnancies were rinsed in PBS and fixed in 4% paraformaldehyde. The obtained sections were examined by both light and electron microscopy. Subsequently, immunohistochemical staining was performed to evaluate apoptosis and vascularization by caspase-9 and VEGF antibodies.

Results: Capillary structures in various sizes, both in free and stem villi, were observed more densely in GDM group, than the control and Type-1 DM groups, on electron microscopy. Similarly, when compared to Type-1 DM and controls, decreased amount of microvilli with more irregularity and blunting on the villus surface was detected. GDM group showed increased immunoreactivity in capillaries of stem villi, free villi and endothelial cells when compared to Type-1 DM and control groups. Regarding the immunohis-

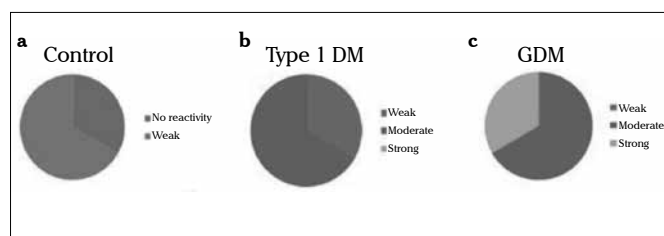


Figure 1. Immunohistochemical staining results with anti-VEGF antibody on placental tissue sections. Vascular formations are weaker in the control group than the other groups (a), but vascular formations in stem villi and intense VEGF immunoreactivity in endothelial cells are present in the Type-1 DM (b) and GDM (c) groups.

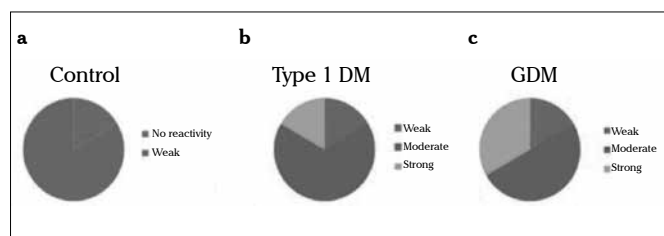


Figure 2. Immunohistochemical staining results with caspase-9 antibody on placental tissue sections. Absence of Caspase-9 immunoreactivity in syncytiotrophoblasts (SSTs) in the control group (a), intense immunoreactivity in SSTs in the Type-1 DM (b) and GDM groups (c).

tochemical staining with caspase-9; Type-1 DM and GDM groups showed stronger immunoreactivity than the control group, especially in syncytiotrophoblastic cell nuclei and stromal cell nuclei. But there was no significant difference between Type-1 DM and GDM groups.

Conclusion: Type-1 DM and GDM placentas, showed increased villous stromal capillarization, increased immunoreactivity with VEGF and caspase9, and increased syncytial nodes, which may develop secondary to placental hypoxia-ischemia. But, more participants are needed to confirm these conclusions.

Keywords: Placenta, diabetes mellitus, VEGF, caspase 9

[OP-091]

Intended vaginal birth after cesarean section, retrospective analysis of an eight years period from a single perinatal center in Germany

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Objective: The aims of this study are to evaluate the perinatal outcomes including the success of vaginal birth, maternal, fetal, and neo-

natal well-being, and complication rates after intended vaginal birth after cesarean (VBAC) trial, in order to reduce cesarean section rates.

Material and Methods: Birth records from 2008–2016 in hospital database of Obstetrics and Gynecology Department of Leverkusen Hospital were reviewed retrospectively. 607 patients fulfilled the inclusion criteria such as singleton pregnancy, cephalic presentation, and a past medical history of only one previous cesarean section.

Results: In 8 years' data, the success rate of VBAC was 64.6 % (n=392 vaginal births) and repeated cesarean rate was 35.4% (n=215). Operative deliveries with forceps (n=3) and vacuum extraction (n=66) constituted 11.3% of total and 17.6% of vaginal births. Postpartum laparotomy was performed in one patient for reason of occult rupture and retroperitoneal hematoma, but the uterus could be preserved. In another patient with no finding of uterus rupture in the initial cesarean delivery, relaparotomy was performed because of intraabdominal bleeding and uterine atony. Uterus could also be preserved in this case. Furthermore in another patient, subtotal hysterectomy was performed immediately after emergency cesarean section following uterus rupture. Rate of hysterectomy and laparotomies as major surgical complications categorized in grades III-IV according to the Clavien-Dindo classification in relation of the VBAC were 0.49% (3/607); however, no maternal mortality occurred. There were 35 neonates with first minute APGAR scores lower than 7 and 7 neonates persisted with 5th minute APGAR scores lower than 7. Of the 35 neonates, 22 required short time supervision, 7 required CPAP for short time, 3 required CPAP for >= 1 days, and 3 required intubation. Fetal mortality in one case was attributed to severe hydrops fetalis and prematurity at 30 weeks. One suspected hypoxic ischemic encephalopathy case has not developed any symptoms and has represented normal neuromotor development within 2 years of life.

Conclusion: Intended VBAC could be safely applied and is also effective in decreasing cesarean rates. No fetal or maternal death occurred in the context of uterine rupture.

Keywords: Vaginal birth after cesarean, pregnancy outcome, high-risk pregnancy, parturition, newborns

[OP-092]

Activation of STAT3 and TNF α in severe pre-eclampsia

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Pre-eclampsia is a complication of pregnancy. Women with pre-eclampsia have high blood pressure, protein in their urine and may develop other symptoms and problems. TNF α has been shown to have an effect on placental invasion, apoptosis, TNF- α in particular is known for its cytotoxic effects, which are mediated largely through TNF receptor 1 (TNFR1) via its intracellular death domain, which

activates the caspase apoptosis pathway. STAT3 is a key mediator of the response to each of these cytokines, as well as EGF and other growth factors and is known to contribute to preparing the endometrium for implantation. Inhibition of activated STAT3 function has been shown to block implantation when applied locally to the uterus. It has also been demonstrated that PStat3 is a key regulator of trophoblast invasion and that phosphorylated Stat3 enhances the invasiveness of trophoblast cells. The aim of this study was to evaluate by the histopathologic, immunohistochemistry and westernblotting methods of placenta tissues from patients with severe pre-eclampsia with and without haemolysis, elevated liver enzymes and low platelets (HELLP) syndrome. Twenty patients with preeclampsia 20 age-matched healthy pregnant women were enrolled in this study (in total 40 pregnant women). Placenta biopsies of babies born at 35-38 weeks of pregnancy were removed. The patient and control groups were similar according to baseline obstetric characteristics. In control group placentas, chorionic villous structures appeared with connective tissues core covered by trophoblastic cell layers; chorionic villous was rich with fetal capillaries. In histopathologic examination of preeclamptic placenta; cytotrophoblastic cellular proliferation, fibrinoid necrosis, endothelial proliferation, calcified and hyalinised villous spots were observed. TNF- α expression in preeclamptic placentas increased. Especially decidual cells and in endothelial cells of blood vessels, also showed a significant increase in the area of the syncytial node. This study showed that pSTAT3 immunoreactivity were localized in both villous cytotrophoblast cells and decidual cells in the placentas. Pstat3 expression in preeclamptic placental decidual cells decreased and trophoblast cells. Western blotting applications pstat3 were reduced, also showed close parallels with immunohistochemical findings. We demonstrate that expression of pSTAT3 is decreased in the blood vessel endothelial cells of Pre-eclampsia placentas relative to control specimens (Figure 1), which suggests that pSTAT3 may play a role in aberrant placental blood vessel development in Pre-eclampsia. As compared with normotensive pregnancies, decreased expressions pSTAT3 proteins were observed in villous cytotrophoblast

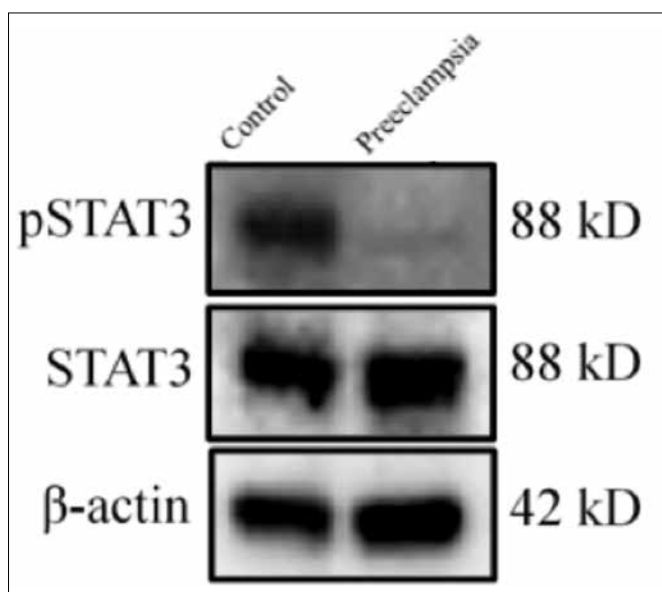


Figure 1. Phosphorylation of STAT3 (S727) was abolished in placenta of patients with preeclampsia. Equal amounts of total proteins were run on the gel and analysed by Western Blotting using anti-STAT3, anti p-STAT3 (S727) and anti- β -actin antibodies. β -actin was used as a loading control

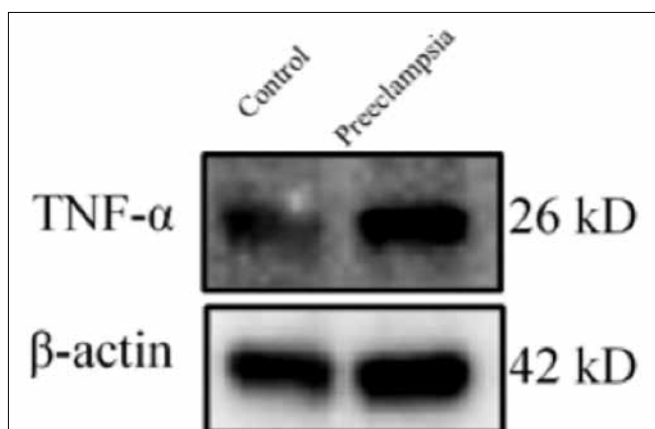


Figure 2. The expression of TNF- α on placenta was dramatically increased in patients with preeclampsia. Equal amounts of total proteins were run on the gel and analysed by Western Blotting using anti-TNF- α and anti- β -actin antibodies. β -actin was used as a loading control

cells, decidual cells and placentas in patients with Hellp syndrome. Pre-eclampsia, placental decidual cells, trophoblast cells and vascular endothelium is affected. In this case, inter-cell signal transduction and are thought to be caused to change in angiogenesis. Tumor necrosis factor alpha (TNF- α) expression in preeclamptic placentas increased (Figure 2) This may improve placental hypoxia. As compared with normotensive pregnancies, increased expressions. These findings suggest that TNF-alpha in the placenta is a key cytokine to interfere with trophoblast invasion into the uterus in pre-eclampsia

Keywords: Placenta, preeclampsia, STAT3, TNF α

[OP-093]

Can anemia predict perinatal outcomes in pregnancy?

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Objective: The aim of this retrospective study is to investigate the effect of anemia on perinatal outcomes as preterm delivery (PTD) and low birth weight (LBW) in the different stages of pregnancy. Determination of the correlation between anemia and perinatal outcomes may guidance for necessity of iron supplementation during pregnancy

Material and Methods: This retrospective study was conducted on 39587 Turkish pregnant women who delivered between January 2011 and September 2014. Anemia during pregnancy was defined as hemoglobin (Hb) <11 g/dl, low birth weight was defined as birth weight <2500gr and PTD was defined as <37 weeks. The pregnant women were divided into 3 groups (Hb <10 gr/dl, Hb 10-11 gr/dl, Hb >11 gr/dl). Perinatal outcomes were compared between these anemic and non-anemic groups. Also we compared anemic groups itself. All analyses were conducted using SPSS 22.0.

Results: The anemia prevalence in our study was 25.1% and demographic characteristics of patient are summarised in Table 1. In the first and second trimester of Hb <10 g / dl group LBW ratio was significantly higher (respectively 13.5 %, 9.8 %, p = 0.03; 22.7 %, 14.7 %, p = 0.001; 13.5 %, 9.8 %, p = 0.03; 22.7 %, 14.7 %, p = 0.001)

Table 1. Demographic characteristics

		HB ≥11 gr/dL		HB <11 gr/dL		Total		p
Maternal age (years)		27.69±6.04		27.18±6.08		27.56±6.05		0.00
Parity	1	12968	43.1%	4329	43.0%	17297	43.1%	0.987
	2-4	16155	53.7%	5417	53.8%	21572	53.7%	
	5+	728	2.4%	246	2.4%	974	2.4%	
Delivery	Vaginal	13631	46.0%	4213	42.2%	17844	45.1%	0.00
	Caesarean	15974	54.0%	5769	57.8%	21743	54.9%	
Abortion numbers	0	3901	63.9%	1116	59.5%	5017	62.9%	0.00
	1	1685	27.6%	612	32.6%	2297	28.8%	
	2+	516	8.5%	147	7.8%	663	8.3%	

HB: Hemoglobin

P value <5.05 is considered statistically significant

Table 2. Prenatal outcomes

	Delivery				Low Birth weight				Preterm Delivery				Birth Weight	
	Vaginal		Caesarean		No		Yes		No		Yes		Median	SD
	N	%	N	%	N	%	N	%	N	%	N	%		
Anemia 1.Tr														
HB <10 g/dL	113	2.8%	212	3.8%	283	3.3%	44	4.8%	274	3.3%	33	3.9%	3122.34	739.88
HB 10-11 g/dL	348	8.7%	470	8.5%	741	8.5%	83	8.6%	696	8.4%	128	9.5%	3150.31	686.23
HB >11 g/dL	3555	88.5%	4818	87.6%	7675	88.2%	838	86.6%	7342	88.3%	1169	86.6%	3187.43	627.86
P	0.02				0.102				0.18				0.01	
Anemia 2.Tr														
HB <10 g/dL	441	8.5%	587	9.4%	812	8.7%	138	13.3%	744	8.4%	308	13.2%	3082.23	682.89
HB 10-11 g/dL	1284	23.4%	1414	22.3%	2088	22.3%	439	24.3%	1840	22.2%	357	23.2%	3002.66	676.70
HB >11 g/dL	3114	67.1%	4313	68.3%	6445	69.2%	1112	62.2%	6121	69.3%	1439	61.7%	3068.39	610.47
P	0.41				0.00				0.00				0.05	
Anemia 3.Tr														
HB <10 g/dL	1187	12.3%	1714	12.5%	2878	12.3%	371	13.7%	2427	12.1%	322	13.9%	3163.81	627.39
HB 10-11 g/dL	2029	20.8%	2820	20.8%	4392	20.8%	508	18.8%	4110	20.8%	792	21.2%	3189.45	696.48
HB >11 g/dL	8479	87.0%	9199	87.0%	14073	88.3%	1829	87.5%	19450	87.3%	2480	65.1%	3173.70	624.17
P	0.84				0.01				0.01				0.04	

SD: Standard deviation, HB: Hemoglobin, P value < 0.05 is considered statistically significant

p=0.00) In the second and third trimesters of Hb <10 g/dl group PTD ratio is significantly higher (respectively 29.1%, 19%, p=0.00; 17.7%, 15.4% p=0.02). In the first trimester Hb <10 g/dl group cesarean section rate was significantly higher (respectively 65.2%, 57.6%, p=0.01). In the first, second and third trimesters of Hb <10 g/dL group, average birth weight is low in Table 2. Pregnant women with anemia in their second/third, PTD rate was significantly higher than in the first trimester. Pregnants with anemia during the whole pregnancy, cesarean section and PTD ratio were significantly higher (respectively 62.4%, 43%, p=0.00; 19.1%, 15.5%, p=0.00).

Discussion: As noted in several studies in the literature, anemia during pregnancy is together with suboptimal perinatal outcomes such as premature births and low birth weight infants. In this study, in the first, second and third trimesters of Hb <10 g/dl group PTD and LBW ratio were higher than non-anemic group and the average birth weight is low. Also in the group with anemic during the whole pregnancy, cesarean section and PTD ratio were higher than non-anemic group. In our study, there is a strong association between PTD and LBW infants with anemia.

Conclusion: In the first, second and third trimester of Hb <10 g/dl group, LBW and PTD ratio is higher than non-anemic group. First trimester Hb <10 g/dL group was with high cesarean rate. The mean birth weight was significantly lower in anemic pregnant women in the second tri-

mester. In the 2/3 trimester Hb <10 g/dl group preterm birth rate was higher than the group with the same hemoglobin levels in the first trimester. So the trimester 2/3 <10 g/dL Hb values were at higher risk for PTD than the first trimester. In pregnant with anemia during the whole pregnancy, cesarean section and PTD ratio were significantly higher.

Keywords: Anemia, preterm delivery, low birth weight

[OP-094]

Do adipokines have an association with gestational diabetes mellitus?

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Objective: Only a few adipokines have been investigated with respect to their involvement in gestational diabetes mellitus (GDM). Evidence in the existing literature to date does not support a clear role of chemerin, retinol binding protein-4 (RBP-4) and visfatin for prediction of GDM. The aim of the present study was to investigate the association of maternal serum levels of chemerin, RBP-4, visfatin and insulin with GDM.

Material and Methods: This cross-sectional study was undertaken in Obstetrics and Gynecology Department of Hitit University between March, 2015 and September, 2015. A total of 158 pregnant women were screened between 24 and 28 weeks of gestation for GDM according to the recommendations of The American College of Obstetricians and Gynecologists (ACOG). They were divided into two groups; GDM group (n=76, median of age: 29 and control group (n=82, median of age: 26). Maternal serum concentrations of chemerin, RBP-4, visfatin, insulin and homeostasis model assessment-insulin resistance (HOMA-IR) were assessed.

Results: There was no difference in age and gestational age at the time of study between GDM group and control group (p=0.058 and p=0.820 respectively). But the BMI of GDM group was higher than control group (p<0.001). The serum concentrations of RBP-4, chemerin and visfatin did not demonstrate a significant difference in both groups (p=0.871, p=0.100, p=0.886 respectively). As expected, there was a significant difference in serum levels of insulin and HOMA between GDM and control groups [14.94 (1.39-32.26) vs 9.87 (3.53-23.98, p<0.001 and 3.73 (0.33-8.43) vs 1.77 (0.6-4.59), p<0.001 respectively]. The insulin levels and HOMA of GDM group were significantly higher than those of control group. Correlation analyses of chemerin, RBP-4, visfatin, insulin and HOMA-IR in both groups revealed that there were a weak degree of positive correlation between maternal RBP-4 and chemerin (Spearman r=0.251, p=0.026) and a strong positive correlation between maternal insulin and HOMA (Spearman r=0.868, p<0.001).

Conclusion: Comparisons of serum chemerin, RBP-4 and visfatin in GDM does not reveal any difference in pregnant with GDM and healthy ones. We suggest that long-term observations on the adipokines during pre-pregnancy, pregnancy and postpartum period would enhance to realise the pathogenesis of GDM. Further prospective studies will be essential to elucidate the contribution of adipokines in GDM and positive correlation between maternal RBP-4 and chemerin.

Keywords: Chemerin, retinol binding protein-4, visfatin, gestational diabetes

[OP-095]

Comparison of short term perinatal outcomes in infants with early preterm intrauterine growth restriction (IUGR) of absent (or Reverse) and normal end-diastolic umbilical artery blood flow

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Objective: To evaluate the association of abnormal umbilical artery doppler parameters with the outcome of perinatal period in newborns with intrauterine growth retardation (IUGR).

Material and Methods: The research group of our study was included early preterm birth (280-336 gestational weeks) with both absent or reverse (AREDF) and normal end-diastolic umbilical artery doppler (NEDF) that were complicated with IUGR. They were divided into two subgroups according to the association with AREDF and NEDF. IUGR was described as an estimated birth weight that is less than the 10th percentile for gestational age. Inclusion criteria were predefined as follows; singleton pregnancy, prenatal diagnosis of fetus with no congenital abnormality (exception of congenital cardiac anomalies mostly diagnosed after the birth). The last menstrual bleeding (with regular cycles between 28-30 days) was used to calculate an estimation of gestational week which was also confirmed by the previous ultrasound exams performed in first trimester timeline. Intrauterine fetal infections, prenatal diagnosis of congenital anomalies were excluded from the study groups.

Results: 113 pregnant women had IUGR which were associated with 86 of abnormal and 27 normal patients exposed umbilical artery doppler. There were 7 fetuses with reverse end-diastolic umbilical artery blood flow. According to seen recent menstrual period and ultrasound findings together, there were lower mean gestational week in AREDF than NEDF group (31.1 ± 1.7 vs 32.5 ± 1.1 $p=0.001$; 27.9 ± 2.0 vs 29.4 ± 2.0 week, $p<0.001$ respectively). The mean birth weight of NEDF was significantly higher than AREDF group (1104 ± 309 g vs 1395 ± 326 g $p<0.001$). Less than 1000 g of birth weight rate of AREDF group was significantly higher (37% vs 4.2% $p=0.002$), while more than 1500 g of birth weight rate of AREDF was statistically lower when compared to NEDF (14.1% vs

Table 1. Maternal and neonatal demographic characteristics of the groups

	AREDF n=87	NEDF n=26	OR	CL (95%)	p
Maternal age (year)	26.9±4.8	25.7±5.0			0.291a
Maternal BMI (kg/m ²)	28.9±4.0	28.3±5.3			0.511a
Gestational week (USG)	31.1±1.7	32.5±1.1			0.001a
Gestational week (LMP)	27.9±2.0	29.4±2.0			0.001a
Birth weight (g)	1104±309	1395±326			0.001a
Birth weight < 1000 (g)	37.2(29/78)	4.2% (1/24)	0.1	0-0.6	0.002b
Birth weight ≥ 1000 and < 1500 (g)	48.7%(38/78)	54.2% (13/24)	0.8	0.3-2.0	0.641b
Birth weight ≥ 1500 and < 2500 (g)	14.1% (11/78)	41.7% (10/24)	0.2	0.1-0.6	0.003b
Oligohydramnios	35.6% (31/87)	53.8% (14/26)	0.5	0.2-1.2	0.096b
Male neonates	58.6% (51/87)	53.8% (14/26)	0.8	0.3-2.0	0.666b
Cesarean section	88.5% (77/87)	96.2% (25/26)	3.3	0.4-26.6	0.248b
Multiparity	44.9% (35/78)	25.0% (6/24)	2.4	0.8-6.8	0.083b
Previous stillbirth history	3.4% (3/87)	7.7% (2/26)	0.4	0.1-2.7	0.356C
Previous PIH history	16.1% (14/87)	11.5% (3/26)	1.5	0.4-5.6	0.569b
Systemic disease history	7.7% (86)	12.5% (3/26)	0.6	0.1-2.5	0.468b
Corticosteroid application	92% (80/87)	76.9% (20/26)	3.4	1.0-11.3	0.035b
Magnesium application	27.6% (24/87)	11.5% (3/26)	2.9	0.8-10.6	0.092b
Surfactant application	33.3% (26/78)	20.8%(5/24)	1.9	0.6-5.7	0.244b
Diagnosed as PIH	48.7% (55/87)	30.8% (8/26)	2.6	1.0-6.7	0.037b

PIH, Pregnancy Induced Hypertension; BMI, body mass index; LMP, last menstrual period; USG, ultrasonography; AREDF, absent or reverse end-diastolic flow; NEDF, normal end-diastolic flow; OR, Odds ratio; CI, Confidence interval. a Student's t test (for independent samples) b Chi-Square test c Fisher's Exact test

Table 2. Perinatal outcome of the groups

	AREDF n=87	NEDF n=26	OR	CL(95%)	p
Perinatal mortality	21.8% (19/87)	11.5% (3/26)	2.1	0.6-7.9	0.244b
Stillbirth	10.3% (9/87)	7.7%(2/26)	1.4	0.3-6.9	0.689b
*Neonatal mortality	12.8% (10/78)	4.2% (1/24)	3.4	0.4-27.9	0.232b
APGAR scores <=7(1 min)	41.0% (32/78)	62.4% (15/24)	0.4	0.4-1.1	0.065b
*Presence of NICU stay	75.6% (59/78)	95.8% (24/25)	0.1	0- 1.1	0.029b
RDS*	79.5% (62/78)	79.2% (19/24)	1.0	0.3-3.1	0.973b
Pneumothorax	0% (0/78)	4.2% (1/24)	1.0	0.9-1.0	0.235c
BPD	3.8% (3/78)	4.2% (1/24)	0.9	0.1-9.3	1c
Pulmoner hypertension	5.1% (4/78)	4.2% (1/24)	1.2	0.1-11.7	1c
Intubation/mechanical	30.8% (24/78)	16.7% (4/24)	2.2	0.7-7.2	0.176b
*Hood/nasal CPAP need	73.1% (57/78)	79.2% (9/24)	0.7	0.2-2.2	0.549b
*Hyperbilirubinemia	82.1% (64/78)	70.8% (17/24)	1.9	0.7-5.4	0.235b
*Sepsis	15.4% (12/78)	0% (0/24)	1.2	1.1-1.3	0.041b
IVH	9.0 % (7/78)	8.3 % (2/24)	1.1	0.2-5.6	0.923b
Feed intolerance	44.9% (35/78)	8.3% (2/24)	9.0	2.0-40.7	0.001b
*‡PDA	21.8% (17/74)	8.3% (2/25)	3.1	0.1-14.4	0.139b
‡PFO	16.7% (13/78)	20.8%(5/24)	0.8	0.2-2.4	0.640b
Congenital heart diseases	15.4% (12/78)	8.3% (2/24)	2.0	0.4-9.6	0.380b

CI, confidence interval; NICU, neonatal intensive care unit; CPAP, continuous positive airway pressure; BPH, Bronchopulmonary dysplasia, IVH, intraventricular hemorrhage; PDA, patent ductus arteriosus. a Student's t test (for independent samples) b Chi-Square test c Fisher's Exact test *All outcomes were analysed with the exclusion of stillbirth cases (accept only stillbirth) ‡DA & PFO were not accepted as congenital cardiac disorder. Total means alive and stillbirth (n=87 & n=26).

41.7% p=0.003). The ratio of corticosteroid (betamethasone) application in AREDF group was higher (92% vs 76.9% p= 0.035). AREDF group has more complicated with pregnancy induced hypertension (48.7% vs 30. 8 % p= 0.037). Shown in Table 1. Respiratory distress syndrome, surfactant use, and other respiratory problems such as pneumothorax, pulmonary hypertension and bronchopulmonary dysplasia were not statistically different in groups. Mean length of neonatal intensive care unit stay of AREDF group was significantly higher (40.6±23.0 vs 24.3±16.1 p<0.001). The sepsis ratio in AREDF group was significantly higher than NEDF group (15.4% vs 0% p=0.041). Feeding intolerance ratio was statistically increased in AREDF group when compared NEDF group (44.9% vs 8.3% p<0.001). The ratio of congenital cardiac diseases in AREDF was higher than in NEDF, but statistically significant (15.4% vs 8.3 % p=0.380). Mortality rate in AREDF group was higher but not statistically significant (12.8% vs 4.2%). Shown in table 2.

Conclusion: The lenght of NICU day of AREDF was longer due to their lower mean birth weight and gestational age, and perinatal morbidities such as feeding intolerance, sepsis and patent ductus arteriosus. AREDF may be associated with congenital cardiac anomalies. Patients with IUGR and umbilical doppler abnormalities should be close followed up because of higher rate of perinatal morbidities.

Keywords: Doppler ultrasonography, fetal growth restriction, perinatal outcome, umbilical artery

[OP-096]

Low circulating levels of Cyclophilin A (CypA) in women with polycystic ovary syndrome

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Objective: Polycystic ovary syndrome (PCOS) is one of the most common complex endocrine pathology which is characterised by oligo/anovulation, hormonal and/or clinical hyperandrogenism, and the appearance of polycystic ovaries on ultrasound. Cyclophilin A (CypA), a 17 kDa protein, is a member of immunophilin family which is present in high abundance in all eukaryotic cells. CypA exhibit many different functions such as protein folding and trafficking during the cell homeostasis. However, CypA can be secreted in response to inflammatory stimuli and secreted CypA posses mitogenic activity via extracellular signal-regulated kinase (ERK) pathway activation. Recent reports showed that, there is a variation in the function of ERK pathway in both skeletal muscle cells and in theca cells from women with PCOS. This finding may implicate the role of abnormally reduced ERK pathway activation in the pathogenesis of insulin resistance and the excessive ovarian androgen production. Alterations in the circulating CypA level can be associated with abnormal activation of ERK pathway in the pathogenesis of PCOS. The aim of this study was to evaluate serum CypA levels in women with PCOS.

Material and Methods: Study subjects comprised of 49 patients with PCOS and 30 normal healthy volunteers. Demographic characteristics, medical history and clinical findings of all participants were recorded in a database. PCOS was described according to the European Society for Human Reproduction and Embryology and the American Society for Reproductive Medicine (ESHRE/ASRM) criteria. Serum CypA level was measured using a CypA ELISA Kit. Relationship between serum CypA levels and the clinical findings and blood markers of PCOS were also evaluated.

Results: Median serum level of CypA was lower in women with PCOS compared to the age matched control subjects (8,9 and 42,5 respectively, p < 0.001). Serum levels of total testosterone were not correlated with serum levels of CypA (r = -0,211, p = 0,06). Age, body mass index (BMI), waist-hip ratio (WHR), hirsutism score were not associated with serum CypA levels.

Conclusion: Our study demonstrated that patients with PCOS have lower circulating levels of CyPA than those of women with normal ovaries. Decreased CypA level may be related to the increased androgen production and insulin resistance in PCOS patients. Further research is needed to evaluate the association between CypA and PCOS.

Keywords: Hyperandrogenemia, insulin resistance, PCOS, Cyclophilin A

[OP-097]

The effect of first trimester fasting glucose levels on pregnancy outcome

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Objective: Screening and the diagnostic criteria of Gestational diabetes mellitus (GDM) has been the subject of considerable controversy. In 2010 International Association of Diabetes and Pregnancy Study Groups (IADPSG) suggested earlier screening for GDM and FPG (fasting plasma glucose) levels at first prenatal visit between 92 mg/dl and 126 mg/dl to be defined as GDM. In this study we aimed to identify the importance of fasting plasma glucose level in the first trimester on pregnancy outcome.

Material and Methods: This retrospective cohort study was undertaken at Zekai Tahir Burak Women's Health Care, Training and Research Hospital, Ankara, Turkey. All the patients who gave birth in our hospital and attended antenatal clinic both in the first trimester and underwent oral glucose tolerance test (OGTT) with 50g of anhydrous glucose between 24 and 28 weeks of gestation are analyzed from the hospital records and perinatal outcomes were noted. In women with first trimester fasting glucose level ≥ 126 mg/dl and random plasma glucose level ≥ 200 mg/dl were accepted as overt diabetes and were excluded from the study. Patients were divided into 6 groups according to FPG and 50 gr GCT status: Group 1 (in cases with first trimester fasting glucose level < 92 mg/dl, 50 gr GCT ≥ 92 mg/dl, 50 gr GCT within normal limits), Group 2 (in cases with first trimester fasting glucose level < 92 mg/dl, 50 gr GCT > 140 mg/dl and 100 gr oral glucose tolerance test (OGTT) values within normal limits), Group 3 (in cases with first trimester fasting glucose level < 92 mg/dl, 50 gr GCT > 140 mg/dl and at least 2 abnormal values in 100 gr OGTT), Group 4 (in cases with first trimester fasting glucose level ≥ 92 mg/dl, 50 gr GCT within normal limits), Group 5 (in cases with first trimester fasting glucose level ≥ 92 mg/dl, 50 gr GCT > 140 mg/dl and 100 gr OGTT values within normal limits) and Group 6 (in cases with first trimester fasting glucose level ≥ 92 mg/dl, 50 gr GCT > 140 mg/dl and at least 2 abnormal values in 100 gr OGTT). Gestational week at birth, route of delivery (vaginal or cesarean), obstetric complications, birthweight, 1' and 5'

apgar scores and neonatal intensive care unit (nicu) admission were compared between the groups

Results: The prevalence of GDM in our study was 2,6% (14/549). The median age was 27 (17-44), prepregnancy median BMI was 23 (14-43). Macrosomia, birthweight, preterm birth, NICU admission and meconium stained amnion was statistically different between groups (Table 1). There was no statistically significant difference between groups in terms of oligohydramnios, route of delivery, Apgar scores, growth retardation, preeclampsia and polyhydramnios.

Conclusion: These data demonstrate that higher first trimester fasting glucose levels, within what is currently considered as nondiabetic, increase the risk of adverse pregnancy outcomes. Further research is required to provide evidence of the effectiveness of early detection and treatment of women at high risk for these complications improves pregnancy outcome.

Keywords: Fasting plasma glucose, gestational diabetes mellitus, pregnancy outcome

[OP-098]

Nause and vomiting in pregnancy is associated with increased levels of serum growth differentiation factor 15

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Objective: Growth differentiation factor 15 (GDF-15) localizes to the decidua and syncytiotrophoblast, increases through the first trimester in serum and is suggested to play an immunomodulatory role to facilitate pregnancy success. Our objective was to measure the circulating levels of GDF-15 in pregnant women with nausea and vomiting (NV) and to compare their levels with age and body mass index (BMI) matched control pregnant.

Material and Methods: This is a case-control study. After approval of the Local Ethics Committee, the subjects were consecutively enrolled into the study in four-month period. The pregnant subjects were classified into case group diagnosed with nausea and vomiting, without methabolic disturbance, (n=40) and age and BMI matched control group without a diagnosis of nausea and vomiting (n=40) during their pregnancies. Serum GDF-15 was measured. Statistical analysis was performed using SPSS software package.

Results: The study included 40 pregnant woman with NV and 40 healthy pregnant women without NV. The groups did not differ statistically in respect to age, BMI and gestational week. The mean GDF-15 level at presentation was 1084.2 ± 177.4 pg/ml among pregnant with NV and 825.6 ± 150.2 pg/ml among with control groups. Serum GDF-15 values were significantly higher in subjects with NV compared to the control groups ($p < 0.001$).

Table 1. The percentage of adverse fetal outcome between groups

%	Meconium stained Amnion	NICU admission	Macrosomia	Preterm Birth	Polyhydramnios
Group 1	7.0	7.0	4.4	8.3	1.2
Group 2	10.4	10.4	4.2	12.5	0
Group 3	20.0	20.0	0	40	0
Group 4	1.6	1.6	13.1	3.3	1.6
Group 5	28.6	0	0	0	7.1
Group 6	0	11.1	22.2	0	11.1
p value	0.011	<0.001	0.016	0.033	0.076

Conclusion: We found that NV was associated with elevated maternal serum GDF-15 levels compared to healthy pregnancies. Our study suggested that nausea and vomiting during pregnancy is a sign of well immunomodulation.

Keywords: Nausea and vomiting, GDF-15

[OP-099]

The evaluation of placental apoptosis in severe preeclampsia with auto-antibodies and pro-inflammatory cytokines

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Objective: To investigate TNF- α , IL-10, IL-6, AT-1AA and sFlt-1 expressions in normal, severe preeclampsia and HELLP Syndrome placentae and their relation with apoptosis.

Background: Preeclampsia is one of the most important obstetric complications affecting 2-7% of all pregnancies. It is defined as presentation of hypertension and proteinuria after 20th weeks of pregnancy. It is a complicated, systemic syndrome affecting all maternal organs. Inappropriate trophoblastic invasion resulting in abnormal placenta formation and development is the most accused pathophysiology.

Material and Methods: The study was conducted in our institution with 22 normal, 22 severe preeclamptic and 22 HELLP syndrome pregnant who delivered at our perinatology clinic between October 2012- May 2015 after ethical board approval. The placentae were collected right after delivery, taken to institution's pathology laboratory and a full-thickness tissue samples from the fetal surface of the placenta which was in 2 cm distal of the umbilical cord were taken. Serious attention was paid to take samples including chorionic plate of the placantae. All the samples were embedded in paraffin blocks and stored at room temperature. After the collection of all samples hematoxyline-eosin dye and immunohistochemical procedures were applied.

Results: We found statistically significant difference in intra-villous thrombosis ($p < 0.05$), pathological villi (< 0.001), acute atherosclerosis ($p < 0.001$) and severe chorion pathology prescence ($p < 0.001$) in severe preeclampsia and HELLP Syndrome placentae compared to non-complicated placentae. Placental AT1-AA and TNF- α levels were significantly different in the complicated group ($p < 0.03$ and $p < 0.05$, respectively). There was no significant difference in sFlt-1 ($p > 0.351$), IL-6 ($p > 0.654$) and IL-10 levels ($p > 0.698$) between complicated and non-complicated placentae and also between severe preeclampsia and HELLP Syndrome groups. We also did not find any statistical difference in terms of AT1-AA, sFlt-1, IL-6, IL-10, and THF- α compared between gestational weeks (32 weeks and 34 weeks of gestations).

Discussion: Preeclampsia and its relevant forms continue to be the leading causes of maternal mortality. To define its pathology countless studies had been and will be done. Our study with its different population choice brings both conformation and controversies to the present literature. Placental histological findings of this study correlates well

with the previous studies in terms of acute atherosclerosis and enlarged infarct regions in the placentae. Recent studies revealed that AT1-AA originates from abnormal placenta and causes vasoconstriction resulting in fetal blood flow resistance. We also found high AT1-AA levels severe preeclampsia placentae. The proinflammatory cytokine TNF- α found to be elevated in multiple studies together with our study. On the other hand although sFlt-1, IL-10 and IL-6 levels were found to be high in different studies our results did not reveal any difference. This might be the consequence of the small sample size of the previous studies as well as their lack of gestational week grouping.

Conclusion: The pathogenesis of preeclampsia and its sub-groups is unclear. Placental apoptosis is proven in the pathophysiology of the disease and high levels of TNF- α and AT1-AA is strongly associated with the apoptosis.

Keywords: Preeclampsia, placental apoptosis, autoantibody, cytokines

[OP-100]

The effect of maternal obesity on the reliability of fetal biometric measurements

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Objective: Maternal obesity limits the optimal image in ultrasonographic evaluation. The Objective of this study was to evaluate the effect of maternal obesity on the reliability of fetal biometric measurements.

Material and Methods: Patients were divided into two groups based on their body mass index: > 30 kg/m² obese group and < 30 kg/m² control group. Fetal biometric parameters were biparietal diameter, abdominal circumference and femur length. All biometric measurements were performed by two researchers. In addition, first researcher performed two measurements in same patient. Inter-observer and intra-observer correlation were analyzed.

Results: Eighty-two (57.75%) of 142 patients were obese (Table 1)

Table 1. Inter-observer and intra-observer variability results

Inter-observer viability				
	Control group	Intra Class Coefficient (ICC)	Obese group	Intra Class Coefficient (ICC)
BPD-1	90.31±2.74	0.816 (0.636-0.907)	92.11±4.3	0.743 (0.548-0.861)
BPD-2	90.21±3.3		92.23±3.67	
AC-1	343.96±21.3	0.897 (0.806-0.947)	341.3±59.23	0.488 (0.14-0.742)
AC-2	342.67±20.79		351.69±25.66	
FL-1	72.48±3.44	0.862 (0.727-0.931)	74.98±4.29	0.628 (0.377-0.793)
FL-2	72.35±3.29		74.66±4.18	
Intra-observer viability				
	Control group	Intra Class Coefficient (ICC)	Obese group	Intra Class Coefficient (ICC)
Observer-1 BPD	90.31±2.74	0.729 (0.463-0.863)	92.11±4.3	0.706 (0.492-0.840)
Observer-2 BPD	89.97±3.05		92.64±4.33	
Observer-1 AC	343.96±21.3	0.833 (0.669-0.916)	341.3±59.23	0.397 (0.194-0.696)
Observer-2 AC	341.20±19.35		352.21±27.32	
Observer-1 FL	72.48±3.44	0.733 (0.471-0.865)	74.98±4.29	0.592 (0.191-0.794)
Observer-2 FL	72.98±3.25		73.90±3.57	

Variables are given as mean ± standard deviation and ICC (lower limit- upper limit) in %95 confidence interval, BPD: Fetal biparietal diameter, AC: Fetal abdominal circumference, FL: Fetal femur length

Variables are given as mean ± standard deviation and ICC (lower limit- upper limit) in %95 confidence interval, BPD: Fetal biparietal diameter, AC: Fetal abdominal circumference, FL: Fetal femur length

Table 2. Study groups

	Control group	Obese group	p value
Age	31.09±6.24	29.34±7.05	0.342
Gravidity	2 (1-10)	3 (1-6)	0.310
Parity	1 (0-8)	2 (0-4)	0.312
Gestational week	39 (38-40)	38 (38-40)	0.933
Body mass index	27.6±1.93	37.95±5.06	<0.001

Values are given as mean±standard deviation and median(minimum-maximum)

Both inter-observer and intra-observer correlations were lower in obese group compared to controls (Image 1).

Conclusion: Maternal obesity decreases the reliability of fetal biometric measurements. This finding should be confirmed with more researchers in larger study populations.

Keywords: Obesity, ultrasonography, observer variation

[OP-101]

Intrahepatic cholestasis of pregnancy is associated with higher human chorionic gonadotrophin MoM levels, higher incidence of gestational diabetes mellitus and insulin requirement

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Objective: Intrahepatic cholestasis of pregnancy (ICP) is one of the hepatic disturbances which are unique to the pregnancy. Its characteristic features are mild to severe pruritus and disturbed liver function tests. ICP is a reversible form of hepatic disturbances originating mainly from impaired bile flow which usually appears in the late second or third trimester and tends to dissolve rapidly after delivery. Incidence varies between 0.1%-15.6% depending on the ethnicity and region. It is the second most frequent cause of jaundice during pregnancy. Etiology is multifactorial, with a combination of hormonal and environmental factors superimposing on a genetic predisposition. Estrogens and progesterone metabolites have been demonstrated to have role in the pathogenesis. In this study we aim to investigate the association between ICP and second trimester aneuploidy screening parameters and patient characteristics.

Material and Methods: Demographic characteristics of pregnant women and measurements of maternal serum alpha fetoprotein (AFP) and human chorionic gonadotrophin (hCG) concentrations were retrospectively analyzed in relation to diagnosis of intrahepatic cholestasis in a cohort of 49 consecutive singleton pregnancies with this diagnosis from January 2012 through December 2015 at Etlik Zubeyde Hanim Women's Health Training and Research Hospital, and compared with healthy singleton control pregnancies (n=284) from the same clinic over the same period of time.

Table 1. Demographic Characteristics of the Study (Intrahepatic cholestasis of pregnancy, ICP) and Control Groups (Total n=233).

Characteristic	Control Group	Study	p value
Age (year) ¹	28.47±5.43	27.93±5.12	0.535
BMI ¹	28.9±4.12	28.95±4.89	0.962
Pregnancy Duration ¹	38.21±2.65	37.65±1.76	0.656
Neonatal birth weight ¹	3156±654	3112±477	0.161
Gravidity ²	2 (2)	2 (2)	0.286
Parity ²	1 (2)	1(1)	0.006*
Multiparity ³	12 (67.4%)	25 (51%)	0.034*
Ms- AFP ²	0.91 (0.44)	0.87 (0.47)	0.734
Ms-HCG ²	0.99 (0.72)	1.28 (0.99)	0.005*
Ms-Estrial ²	0.91 (0.38)	0.95 (0.49)	0.543
Induction of Labor	25 (13.6%)	15 (30.6%)	0.005*
Jaundice of Newborn	1 (0.5%)	7 (14.3%)	<0.001*

BMI, Body Mass Index; Ms-AFP, Maternal Serum Alpha-Fetoprotein; Ms-HCG, Maternal Serum Human Chorionic Gonadotropin; MoM, Multiple of the Median.

¹ Data are expressed as mean±standard deviation. ² Data are expressed as median (interquartile range). ³Data are expressed as n (%). * Statistically significant

Table 2. Baseline medical characteristics of the Study (Intrahepatic cholestasis of pregnancy, ICP) and Control Groups (Total n=233)

Variable	Control Group	Study Group	p value
Gestational Diabetes Mellitus	11 (6%)	14 (28.6%)	<0.001 ¹ *
Insulin therapy	0	4 (8.2%)	0.0061*
Gall Bladder disease	1 (0.5%)	4 (8.2%)	0.0071*
Liver Disease	0 (0%)	2 (4%)	0.0441*
Gestational Hypertension	7 (3.8%)	2 (4.1%)	1.000 ¹
Preeclampsia	3 (1.6%)	0 (0%)	1.000 ¹
Drug Use	19 (10.3%)	10 (20.4%)	0.057 ²
Previous history of cholestasis	3 (1.6%)	4 (8.2%)	0.0371*

D&C, dilatation and curettage; IVF, in vitro fertilization; NST, non-stress test; NICU, neonatal intensive care unit. ¹Fisher's exact test has been performed instead of Chi-square test due to the expected counts less than 5. ² Pearson Chi-Square has been performed. Data are expressed as n (%). * Statistically significant

Results: Number of parity and the percentage of multiparity were higher among control group. In relation to aneuploidy risk assessment, the median of the MoM values of hCG were significantly higher in the ICP group (p=0.005)(Table 1). Previous history of ICP as well as history of gall bladder and hepatic diseases were significantly higher among ICP patients. Induction of labor and jaundice of newborn were significantly higher among ICP group (p=0.005 and p<0.001 respectively) (Table 2). As an interesting finding, the prevalence of gestational diabetes mellitus (GDM) and the rate of the patients who required insulin therapy were higher among ICP patients and this difference was statistically significant (p<0.001 and p=0.002 respectively) (Table 3).

Discussion: ICP is one of the important morbid complications during pregnancy. There are also findings regarding increased stillbirth and

fetal distress rates those make ICP patients classified in the high risk conditions of pregnancy CP and its relationship with second trimester screening test markers was studied in a few papers and none of them found the same relationship with our study. This is important because the ICP population in our study is the largest to date among papers investigating the relationship with either aFP or HCG. Also the association with GDM is an important finding which would make clinicians gain a new sight during follow-up as GDM adds a new comorbid situation to an already high-risk pregnancy. The pathogenesis of this association is not clear, and processes underlying this extensive impairment of the glucose regulation that requires insulin therapy merits further investigation.

Conclusion: Nulliparity, higher hcg MoM at the second trimester screening test are factors related to presence of ICP. Also while following patients, with either GDM or ICP, their accompanience should be kept in mind.

Keywords: Intrahepatic, cholestasis, pregnancy, HCG, GDM

[OP-102]

New screening method for prediction of preterm delivery in singleton pregnancies

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Objective: To establish a new predictive model for screening the risk of preterm delivery (PTD) before 37 weeks of gestation

Material and Methods: This is a cohort study. Between 2013-2015 all singleton pregnancies (n: 1453) with (38%, 557/1453) or without (62%, 896/1453) PTD risk factors were recruited in the study. Obstetric history, cervical length and nomogram for PTD risk factors were evaluated to establish a new screening risk assessment for PTD. All clinical variables were assessed for an association with 37 week PTD using univariable logistic regression models. Multivariable logistic regression analysis was used to identify a set of predictors. Associations were summarized using the odds ratio (OR) and corresponding 95% confidence interval (CI) estimated from the models. Type-I error rate was taken as 0.25 for candidate variables for multivariate logistic regression. Discrimination was assessed with 300 bootstrap resamples. For each bootstrap sample, a logistic regression model was fit using the variables identified in the final model and the concordance index (c-index) was calculated. The c-index is a measure of a model's predictive accuracy (discrimination). An unbiased estimate of the c-index was obtained based on averaging the 300 c-indices. Calibration was assessed graphically by examining how far the predicted probabilities are from the actual observed proportion with 37 week PTD. Statistical analyses were performed using R software. A nomogram constructed from the final model is presented in Fig. 1. For a given

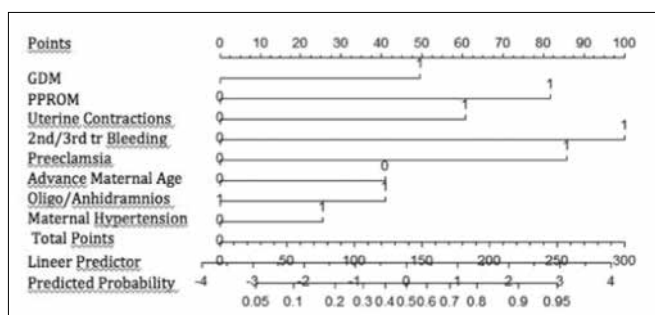


Figure 1. Nomogram for the prediction of 37 week PTD based on the final model

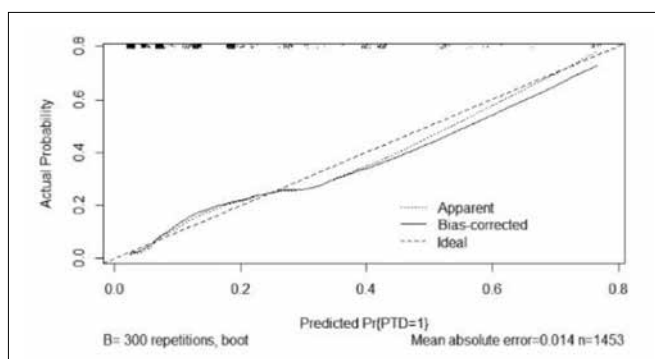


Figure 2. Calibration plot for 300 bootstrap sample

patient, points are assigned to each of the variables and a total score is derived. The total points score corresponds to a predicted probability of 37 week PTD. The performance of the final model was assessed through calibration and discrimination. The models had good calibration as illustrated in the calibration plot in Fig. 2. The unbiased estimate of the c-index derived from bootstrap resamples was excellent (c-index=0.746).

Results: PTD rates were 22.1%. Of those 15,8% pregnancies had at least one risk factor for PTD. Univariable analysis revealed that the most common risk factors for PTD were maternal age (74.5%), in-vitro-fertilization (29.4%), placenta previa (3.9%) respectively. The relationship between PTD and risk factors only gestational diabetes mellitus (GDM) (p:0.057, CI 0.9 - 14.1), PPRM (preterm premature rupture of membranes) (p:0.000, CI 4.2-17.5), early onset of uterine contractions (p:0.000, CI 2.5-9.7), second/third trimester bleeding (p:0.000, CI 4.2-17.5), 3.854-50.672), preeclampsia (p:0.000, CI 4.7-19.4), advance maternal age (p:0.000, CI 0.2-0.5), oligo/anhydramnios (p:0.000, CI 1.5-5.5), maternal hypothyroidism (p:0.000, CI 1.124-3.386) were found statistically significant (p<0.05).

Conclusion: Recently the screening method of PTD is depends on patient obstetric history and cervical length measurement by transvaginal ultrasonography. However clinical symptoms of the pregnancy such as; polihydramnios, GDM etc. are not objectively assessed. We conducted a unique statistical model for PTD. This a new model consists of not only obstetric history and short cervical length but also of the clinical symptoms to evaluate the risk of PTD more sensitive, specific and accurate. Further studies are needed to answer which preventative measures such as; cerclage, cervical pessary, progesterone on the specific conditions and the symptoms is better.

Keywords: Preterm, screening, delivery, risk factors

[OP-103]

Major determinants of newborn survival and duration of hospitalization at neonatal intensive care unit in pregnant with preterm premature rupture of membranes

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Objective: The aim of this study was to assess the predictors of newborn survival in pregnant with preterm premature rupture of membranes.

Material and Methods: Three hundred and eighty eight pregnant with preterm premature rupture of membranes were prospectively followed in perinatology clinic of Zeynep Kamil Women and Children's Health Training and Research Hospital between January 2013 to December 2015. Gestational age at delivery, birth weight, route of delivery, multiple pregnancy, newborn sex, maternal age, some neonatal complications including rop, nec, ich, sepsis congenital anomalies, iugr and maternal complications including diabetes, preeclampsia were used to predict neonatal outcome in terms of duration of hospitalization at neonatal intensive care unit and survival.

Results: IUGR, congenital cardiac anomaly, oligohydramnios, gestational age, birth weight, route of delivery, duration of latent period, rop, sepsis, chorioamnionitis, celestone, rds, nec, ich were significantly correlated with duration of hospitalization at neonatal intensive care unit ($P < 0.05$). In multivariate regression analyses, birth weight, rop, sepsis and congenital anomaly were significant confounders for duration of hospitalization at neonatal intensive care unit ($P < 0.05$). duration of hospitalization at neonatal intensive care unit, congenital anomaly, congenital cardiac anomaly, gestational age, birth weight, route of delivery, neonatal sex, rop, rds, nec, icc were significantly correlated with neonatal survival ($P < 0.05$). congenital anomaly, rop, nec, chorioamnionitis, birth weight and gestational age were significant confounders for neonatal survival.

Conclusion: Birth weight, rop and presence of congenital anomaly are common confounders for both duration of hospitalization at neonatal intensive care unit and neonatal survival.

Keywords: Preterm premature rupture of membrane, Neonatal intensive care unit(NICU), neonatal survival

[OP-104]

Does awareness of gestational age during ultrasonographic fetal biometry affect the results: a preliminary intra-observer variability and agreement study

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Objective: To assess and to compare the intra-observer reliability and agreement for fetal biometric measurements between blinded and non-blinded sonographers for gestational ages and to determine the mean errors of these measurements in singleton pregnancies between 25 and 41 weeks of gestation.

Material and Methods: A prospective clinical study was conducted. First measurements were performed as the sonographer was unaware of patient's last menstrual period (LMP) and gestational age (GA) and results were blinded to the sonographer; the caliper displayed on the screen was veiled by a label placed on the numeric display. The same sonographer performed the measurements after learning and recording the patient's LMP and GA and was allowed to see the caliper displayed on the ultrasound screen, though operator was blinded to any pre-existing measurements. Intra-observer reliability of fetal biometry measurement was assessed and limits of agreement were calculated.

Results: There was no significant difference between the means of blinded (BM) and non-blinded measurements (NBM) except for HC ($p=0.029$). Intra-observer ICCs were very high for each biometric variable, expressed in both mm and days, and for EFW. Mean absolute errors were significantly lower for BPD, HC, AC and FL, in NBM than in BM.

Conclusion: When sonographers are aware of the LMP or are allowed to notice the GA calculated and displayed on the screen, they are more prone to approximate their measurement to the actual gestational age and hence, sonographers blinded to the GA are more likely to measure biometric parameters significantly more distant from the actual value.

Keywords: Gestational age, fetal biometry, intra-observer variability, ultrasonography

[OP-105]

Amniotic fluid paraoxonase-1 activity, thyroid hormone concentrations and oxidative status in neural tube defects

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Objective: The aim of this study was to investigate the potential association between neural tube defects and paraoxonase-1 activity in

amniotic fluid. We studied the total oxidant status, total antioxidant capacity, paraoxonase-1 activity and thyroid hormone concentrations in amniotic fluids of fetuses with neural tube defects.

Material and Methods: The present study was performed at the Department of Obstetrics and Gynaecology and the Department of Clinical Biochemistry of Dicle University between September 2011 and June 2013. The study group included 37 amniotic fluid samples from pregnant women (16–20 weeks of gestation) with fetuses affected by neural tube defects (anencephaly, spina bifida, and encephalocele). The control group consisted of 36 pregnant women who were diagnosed with a high-risk pregnancy according to a 1st- or 2nd-trimester aneuploidy screening and were later confirmed by amniocentesis to have genetically normal fetuses.

Results: There were no significant differences between women with neural tube defects-affected pregnancies and control subjects in maternal age, gestational age, parity, smoking, consanguinity, body mass index, and pre-conception vitamin use. Amniotic fluid paraoxonase-1 activity and total oxidant status were significantly higher ($p = 0.023$, $p = 0.029$, respectively, in Figure 1 and 2) whereas free t4 was significantly lower ($p = 0.022$; Table 2) in fetuses affected by neural tube defects compared to control subjects. In fetuses with neural tube defects, amniotic fluid paraoxonase-1 activity correlated positively with total oxidant status ($r/p = 0.424^{**}/0.010$), and amniotic fluid total antioxidant capacity correlated positively with free t4 ($r/p = 0.381^{*}/0.022$).

Conclusion: This is the first study in the literature to show an associa-

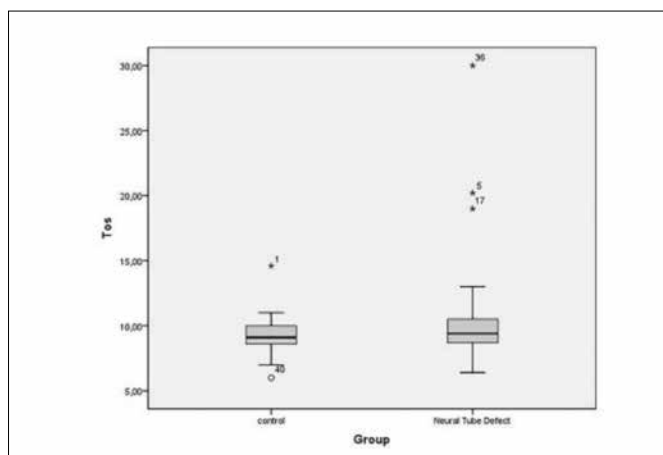


Figure 1. Comparison of PON1 levels between the groups

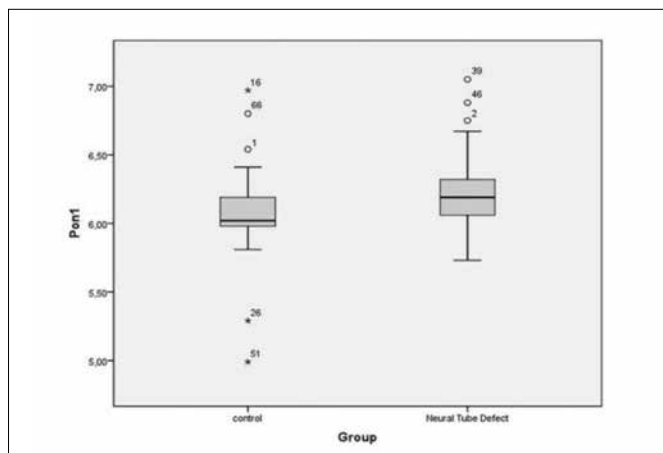


Figure 2. Comparison of TOS levels between the groups

Table 1. Comparison of biochemical characteristics between the groups

	Control	Neural tube defects	P
TSH	0.30±0.17	0.55±0.56	0.182
FT3	1.11±0.75	0.92±0.16	0.132
FT4	3.23±2.87	2.05±0.91	0.022
TAS	0.65±0.33	0.59±0.21	0.351
TOS	9.15±1.42	20.2±27.5	0.029
PON-1	6.01±0.57	6.94±2.92	0.023

Datas were expressed student's t test. Those that did not demonstrate a normal distribution were subject to Mann-Whitney U test. Abbreviations: Thyroid stimulant hormone (TSH), free t3 (FT3) and free t4 (FT4), Total oxidant status (TOS), Total antioxidant capacity (TAC), Paraoxanase 1 (PON1)

Table 2. Comparison of demographic characteristics between the groups

	Control	Neural tube defects	P
Age	32.87±7.17	28.9±9.56	0.116
Parite	3.11±2.40	3.95±6.02	0.506
Gestational Age	17.8±1.24	18.85±2.53	0.168
BMI	21.6±2.4	21.7±3.08	0.883
Smoking	0.34±0.48	0.34±0.48	0.999
Periconceptional vitamin supplement	0.38±0.49	0.17±0.38	0.107
Consanguinity	0.34±0.48	0.52±0.51	0.224

Datas were expressed as Student's t test. BMI: Body Mass Index

tion between paraoxonase-1 activity and thyroid hormone concentrations and neural tube defects.

Keywords: Neural tube defect, paraoxonase-1 activity, free t4, oxidative status

[OP-108]

Accuracy of ultrasonographic fetal weight estimation: association of possible confounding factors

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Objective: To detect factors that have a negative impact on the accuracy of estimated fetal weight.

Material and Methods: This retrospective, cross-sectional study included 90 term singleton deliveries between January 2015 and January 2016 at the Department of Obstetrics and Gynecology of the Gaziosmanpaşa University Hospital. Each pregnant woman hospitalised to our department for delivery, underwent sonography examination. In this evaluation, fetal presentation was confirmed, amniotic fluid index (AFI) was measured, placental location was assessed and the fetal weight was calculated by using measurements of some fetal anthropometric parameters. Fetal biometric parameters were measured within a period of 24 h before delivery. Singleton fetuses with

intact amniotic membrane, and had no detected constitutional and chromosomal abnormalities during the antenatal follow-up period, were included in our study. Patients in the active stage of labour and those with the fetal head engaged to the pelvis were excluded from the study. The sonographic measurements were performed by the same author (HYD) by using the Mindray DC-8 sonography unit, with a 3.5 MHz convex transducer. Newborns were nakedly weighed 10 min after delivery, on a digital weightbridge. Ultrasonographic measurement results were applied to Hadlock 2 fetal weight estimation model. To evaluate the accuracy of EFW the two parameters below were calculated:

Mean error (ME): is the mean of the [estimated fetal weight (EFW) minus actual birth weight (ABW)]

Mean percentage error (MPE): is the mean of the $(EFW - ABW)/ABW \times 100$

Association among the two parameters used for the accuracy of EFW; AFI, placental location, fetal presentation and gender were evaluated. An association between AFW and fetal biometry was sought using the Spearman's correlation. Newborns were evaluated in three subgroups in order to analyse the accuracy of Hadlock 2 regression formula over different weight ranges: <3,000 g, 3,000 – 3,500 g and $\geq 3,500$ g. Tendency of the fetal weight estimation model towards an underestimation or overestimation was also calculated.

Results: We found no significant effect of AFI on the ME of the fetal weight measurement ($p=0.152$). Analysis of the association between fetal presentation and ME revealed no significant effect of fetal presentation on the ME of the fetal weight measurement ($p=0.873$). ME (EFW-AFW) was highest in pregnancies with lateral placental location while it was significantly different between lateral and fundal placental locations (Table 1). We found no significant association between fetal gender and ME ($p=0.342$). MPE that stands for 100 g of actual birth weight was, by minus 8g, the highest in fetuses above 3500g (Table 2). Each of the BPD, AC, and FL measurements were correlated with AFW. However the parameter with the highest correlation was AC ($p=0.000084$).

Conclusion: Fetal weight estimation is an important factor for clinical management decisions. Lateral placental location appears to have a significant effect on the accuracy of EFW. As our findings suggest that mean error of EFW tends to increase as absolute fetal weight increases, risk of underestimation of fetal weight should be kept in mind especially in macrosomic fetuses to avoid inappropriate clinical decisions.

Keywords: Fetal weight estimation, ultrasonography, absolute fetal weight

Table 1. The distribution of placental location

	Anterior (n=28)	Posterior (n=21)	Lateral (n=5)	Fundal (n=36)	P
EFW –	-112,35±	-162,85±	-275,00±	-17,30±	0,148
AFW	325,68 ^{a,b,c}	240,12 ^{a,d,e}	170,04 ^{b,d,f}	292,02 ^{c,e,f}	

Kruskal-Wallis test, Mann-Whitney U test. EFW, estimated fetal weight; AFW, absolute fetal weight. Intragroup comparisons: ^a: $p = 0,840$; ^b: $p = 0,292$; ^c: $p = 0,226$; ^d: $p = 0,229$; ^e: $p = 0,118$; ^f: $p = 0,042$.

Table 2. The distribution of MPE on absolute fetal weight

	< 3000 gr (n = 31)	3000 - 3500 gr (n = 37)	> 3500 gr (n = 22)	P
MPE	0,20±10,92a,b	-1,51±8,00a,c	-8,25±6,28b,c	0,000165

MPE, mean percentage error. Intragroup comparisons: a: $p = 0,322$; b: $p = 0,00015$; c: $p = 0,00042$.

[OP-109]

Relationship between cardiothoracic ratio and assesment of brain sparing in intrauterin growth restriction

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Objective: Brain sparing effect is defined as cerebral blood flow increasing in the intrauterin growth restricted (IUGR) fetuses. As a result of this effect, lower value of the pulsatility index (PI) is determined by Doppler ultrasound of the middle cerebral artery (MCA). Clinical studies showed an increase of cardiothoracic ratio (CTR) in chest radiographies of premature neonates with growth restriction. In addition ultrasonographic measurement of CTR is used to follow up of fetal anemia

Material and Methods: This prospective study was conducted on the 60 singleton pregnant women with IUGR fetus in 3rd trimestr. The PI was determined in the mid- or distal segment of the middle cerebral artery and patients divided into two groups (MCA-PI value below (group1, n:30) or above (group2, n:30) the 5th centile). Cardiothoracic ratio difference was investigated between two groups.

Results: The CTR is significantly different between group 1 and 2 (respectively 0.54 and 0.49) ($p<0.05$). Using ROC curve to anticipate the brain sparing effect, a threshold was calculated 0.51 for CTR (sensitivity 79%, specificity 76%, positive predictive value [PPV] 79%, negative predictive value [NPV] 88%).

Conclusion: This study suggest a significant association between cardiothoracic ratio and MCA-PI. Cardiothoracic ratio may be useful to follow-up of fetuses with IUGR via detecting brain sparing effect.

Keywords: Cardiothoracic ratio, intrauterine growth restriction, brain sparing effect

[OP-110]

Non-invasive prenatal testing for fetal chromosomal abnormalities: Baskent University experience

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Objective: To asses the clinical outcomes of the patients who were opted cf-DNA test for chromosomal abnormalities at tertiary referral University Hospital

Material and Methods: This is a retrospective cohort study. Between 2013-2016 all patients who had cf-DNA (cell free DNA) test results were compared with patients characteristics, pregnancies outcomes.

Results: Among the all-consecutive pregnant patients, of those 91 patients had cf-DNA test for chromosomal abnormality screening in

our clinic during the study period. Only four patients had twin pregnancy and five patients had pregnancy via ovum donation. The most common indications for the test were high risk of chromosomal abnormalities at 11-14th weeks screening (34.4%, 12/91), presence of at least one soft-marker for chromosomal abnormalities (17%, 16/91) and the physicians' suggestion (13.2%, 12/91). Mean age of the patients was 35.33 ± 4.36 . 24% (22/91) of the patients were older than 35 years old. 59% (54/91) of the patients were multigravida and 52% (48/91) of the patients were nulliparous. The mean gestational age on the test day, NT-MoM, PAPPa-MoM, hCG-MoM, gestational age of delivery and newborn weight were (14.64 ± 3.68) (min-max; 10-27), (0.95 ± 0.25), (0.8 ± 0.28), (1.36 ± 0.69), (37.8 ± 2.5), ($3.106 \text{ kg} \pm 0.7$); respectively. The patients chose five different cf-DNA companies. Only one cf-DNA company was using SNP (Single Nucleotide Polymorphisms) technic in which was selected by 14 (15.4%) patients in our series. In all the other cases, the other companies were using massively parallel sequencing technic. The mean fetal-fraction rate was 9.73 ± 4.26 . cf-DNA test (SNP technic) result could not be given to four patients. Even though the one's results were revealed normal (low risk) via massively parallel sequencing, the fetus was die in-utero at 16 weeks of pregnancy. Amniocentesis was performed and normal karyotype was shown in second one. Third one had liver transplantation and SNP technic was not useful. The last one was a patient who had an ovum donation and SNP technic was also not good for this patient. However massively parallel sequencing was given a normal/low risk result for these patients who had no result with SNP. Only two patients' cf-DNA results were high risk for Down syndrome. Amniocentesis was performed and the patients were opted feticide because of Down syndrome. C-section rate was 31% and NICU administration was necessary to six babies after the birth. All babies are healthy and surviving from NICU discharge. Amongst the all patients two of the pregnancy are still on going and no discordant result was observed.

Conclusion: cf-DNA test is a safe, accurate, non-invasive screening method for fetal chromosomal abnormalities. To understanding the method of the test is crucial for some conditions such as transplantation and ovum donations. The test using SNP is not a good option for these pregnancies. Furthermore cf-DNA is still too expensive to become a national screening method in Turkey. Invasive tests such as amniocentesis are still only the option to diagnose the fetal chromosomal abnormalities

Keywords: NIPT, cfDNA, chromosome abnormalities, Down syndrome, screening

[OP-111]

Prenatal diagnosis of fetal urinary anomalies and antepartum approach

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Objective: Fetal urinary tract anomalies are observed in 17.3% of all neonatal anomalies, 20% of neonatal deaths and 0.65% of all pregnancies. Today, widespread use of ultrasound facilitates the prenatal diagnosis of fetal abnormalities. Urinary system abnormalities can present either in mild forms as fetal pyelectasis or lethal forms as polycystic kidney or renal agenesis. In this study, we aimed to present the prenatal approach in 59 pregnant women with ultrasound detected urinary system abnormality in prenatal period.

Material and Methods: Patients who took a diagnosis of fetal urinary tract anomaly at the Gynecology and Obstetrics Department of Dicle University Medical Faculty between January 2009 and July 2013 were evaluated retrospectively. The abnormalities confirmed by ultrasound records, birth data, and ethical committee decisions for fetal termination. Data collected included demographic information of maternal age, gravidity, parity, abortion, number of children, gestational week, and types of fetal urinary tract anomalies. Families were informed about anomaly, and fetuses incompatible with life according to gestational week and/or serious sequel possibility were terminated after the decision of ethics committee and family consent. Ultrasonography examinations were performed with Voluson 730 PRO (General Electric Healthcare, Milwaukee, WI, ABD) device.

Results: Sixty-four pregnant women with urinary tract abnormalities were included the study. The demographic data was shown in Table 1. Isolated urinary anomalies were observed in forty-nine (76.6%) pregnant women, and additional accompanying abnormalities were

Table 1. Demographic data of pregnant women

	mean±SD	min.-max.
Age	26.5±7.2	17-40
Gravidy	3.3±1.9	1-10
Parity	1.8±2.2	0-9
Abortion	0.5±0.7	0-4
Living children	1.5±2.1	0-7
Gestational week	25.5±8.1	13-38
SD: standard deviation min.: minimum max.: maximum		

Table 2. The distribution of subtypes of fetal urinary anomalies

Subtypes	Patients (n)
Unilateral+ bilateral pyelectasis	4 (6.3%)
Megasistis	13 (20.3%)
Posterior urethral valves (PUV)	5 (7.8%)
Polycystic kidney	22 (34.4%)
Multicystic kidney	13 (20.3%)
Renal agenesis	2 (3.1%)
Exstrophy vesicale	2 (3.1%)
Hypospadias-Epispadias	3 (4.9%)
Total	64 (100%)

found in fifteen (23.4%) women. The distribution of subtypes of fetal urinary tract anomalies was shown in Table 2. Fetal termination was applied to fifty-four (84.4%) pregnant women, one women (1.6%) rejected fetal termination, and 9 (14.1%) were followed-up.

Conclusion: Type, unilateral or bilateral localization, and severity of urinary tract anomalies, and also presence of accompanying abnormalities affect the decision of fetal termination. The high percentage of urinary tract anomalies in our center may be related with our hospital to be a tertiary health facility, utilization of sensitive imaging methods, and presence of experienced perinatologists.

Keywords: Congenital anomaly, fetal urinary tract anomalies, prenatal diagnosis, ultrasonography

[OP-114]

Preoperative differentiation between malignant and benign ovarian masses in patients with normal CA-125 levels

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Objective: Ovarian malignancy is the major lethal gynecologic malignancy and it is usually diagnosed lately in advanced stages. Serum CA-125 level, ultrasonographic features of the adnexal mass and combination of these with menopausal status have been reported to be used as cancer associated markers. In this work, we aimed to determine the diagnostic values of some clinical and ultrasonographic features for predicting ovarian malignancies in patients with normal serum CA-125 levels.

Material and Methods: All of the eighty-four patients who were diag-

Table 2. Multivariate binomial logistic regression analysis showing the predictive values of individual risk factors for malignancy

Outcome: Malignancy	Wald	p value	Odds Ratio	95% Confidence interval
Solid area	34.339	<0.001	7.430	3.799-14.532
Postmenopausal state	4.894	0.027	2.893	1.129-7.412
Bilaterality	1.047	0.306	1.881	0.561-6.309
Age > 45 years	1.348	0.246	1.677	0.701-4.012
Median mass diameter	29.280	<0.001	7.012	3.463-14.198

nosed with ovarian malignancy and 168 patients with benign adnexal mass had normal CA-125 levels, and recruited as study and control groups, respectively. Individual characteristics, ultrasonographic features, and risk of malignancy index (RMI) values of the groups were compared retrospectively.

Results: The ages, mean postmenopausal period of the postmenopausal women in the malignant group were significantly higher than the benign group. Nulliparity rates were similar in the two groups. The number of menopausal patients was significantly higher in the malignant group. Median cyst diameter and RMI values were significantly higher, and bilaterality and presence of solid area were more frequent in this group. Logistic regression model showed that ovarian cysts larger than 8 cm [Odds ratio (OR): 7.012; $p < 0.001$; 95% Confidence interval (CI): 3.463-14.198], presence of solid area within the cyst [OR: 7.43; $p < 0.001$; 95% CI: 3.799-14.532], and postmenopausal state [OR: 2.893; $p = 0.027$; 95% CI: 1.129-7.412] were found to be significant factors to predict malignancy.

Conclusion: Ovarian malignancies in patients with normal CA-125 values are frequently diagnosed in early stages of the disease. Ovarian cysts larger than 8 cm, presence of solid area within the cyst, and menopausal status are the most important risk factors for ovarian malignancies in these patients.

Keywords: CA-125, histological type, ovarian cancer, risk of malignancy index, tumor marker

Table 1. Comparison of the individual characteristics of the groups

Characteristics	Malignant group (n=84)	Benign group (n=168)	p value
Age (years)	47.6±15.3	40.1±11.0	<0.001
Nullipara n (%)	16 (19)	38 (22.6)	0.515
Menopause score>1 n(%)	36 (41.7)	29 (17.3)	<0.001
USG score>1 n(%)	21 (25)	7 (4.2)	<0.001
Bilaterality [n(%)]	10 (11.9)	8 (4.8)	0.038
Ascites [n(%)]	2 (2.4)	1 (0.6)	0.255
Solid area	59 (70.2)	42 (25)	<0.001
Multilocularity	18 (16.1)	27 (21.4)	0.295
CA125 (IU/mL, median± Interquartile range)	17.5±13.9	15.3±12.3	0.189
Mass diameter (mm, median± Interquartile range)	90.5±64.5	62±29.7	<0.001
Risk of malignancy index (median± Interquartile range)	28.3±32.8	18.4±15.5	<0.001

[OP-115]

Myometrial invasion in endometrial cancer patients: can magnetic resonans imaging predict the myometrial invasion before surgery?

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Objective: To investigate the value of magnetic resonans imaging (MRI) for detecting preoperative myometrial invasion in endometrial cancer patients.

Material and Methods: Among EC patients with preoperative MRI were included in this study. The data of patients were recorded from their files. MRI reports and MI status in final pathological examination after surgery were compared. The predicting value for MI presence was evaluated.

Results: Totally, 38 patients who were obtained preoperative MRI enrolled into the study. The age of the patients were 37-87, mean

58.8±1.2. The EC was diagnosed by endometrial biopsy. All patients were surgically staged as total abdominal hysterectomy, bilateral salphingo-oophorectomy, pelvic paraaortic lymphadenectomy. The sensitivity, specificity and diagnostic accuracy of MRI assessment of MI were 66.6%, 100% and 68.4%.

Conclusion: The assessment of the MI presence in EC patients by preoperative MRI is a valuable method. But, only upon the basis of MRI findings is not sufficient for deciding treatment plan (surgical staging), yet.

Keywords: Magnetic resonans imaging, endometrial cancer, myometrial invasion

[OP-116]

The utility of tumor markers and neutrophil lymphocyte ratio in patients with an intraoperative diagnosis of mucinous borderline ovarian tumor

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Objective: To evaluate the utility of tumor markers and complete blood count to increase the diagnostic accuracy to detect malignant cases that are intraoperatively reported as mucinous borderline ovarian tumors (BOT).

Material and Methods: Patients who underwent laparotomy at our gynecologic oncology clinic between 2007 and 2015 for evaluation of an adnexal mass with an intraoperative frozen section report of mucinous BOT were retrospectively analyzed. Patients were grouped according to the final pathological diagnoses (malignant, borderline and benign), and were compared in terms of tumor marker levels and complete blood count parameters. Significant parameters were evaluated together with frozen section results, and were assessed for diagnostic accuracy.

Results: A total of 63 patients were included in the study. Of these, 41 patients had borderline, 11 patients had benign, and 11 patients had malignant mucinous ovarian tumors. Patient age, menopausal status, hemoglobin, platelet and lymphocyte counts were similar among

Table 1. Comparison of tumor marker levels between final pathological diagnoses mucinous BOT and mucinous carcinoma groups

Parameters	Mucinous BOT ² cases (n=41) Mean ± SD	Malignant cases (n=11) Mean ± SD	p value
Ca19-9	39.7±20.1	58.8±19.9	0.001
Ca125	61.7±65.2	104.1±58.1	0.001
CEA ¹	4.4±7.1	4.6±12.1	NS
AFP ³	3.4±6.2	4.2±7.3	NS

¹CEA: Carcino Embryonic Antigen; ²BOT: Borderline ovarian tumor; ³AFP: Alfa Feto Protein. Student-t test was used to compare the groups

Table 2. The diagnostic values of parameters to increase the accuracy of frozen section in mucinous ovarian carcinomas

Parameter	Cut-off	AUC ¹	Sensitivity	Specificity	PPV ²	NPV ³
Ca19-9	41.2	0.827	81.39	67.17	51.85	79.65
Ca-125	50.5	0.773	72.63	71.89	52.75	81.87
NLR ^o	2.18	0.718	78.02	64.45	49.58	73.36
Neutrophil	5.15	0.615	66.25	60.83	47.68	65.17

^oNLR: Neutrophil/lymphocyte ratio, ¹AUC: Area Under Curve, ²PPV: Positive Predictive Value, ³NPV: Negative Predictive Value

the groups (p>0.05). On the other hand, white blood cell, neutrophil counts and neutrophil/lymphocyte ratio (NLR) were significantly higher in malignant cases (p<0.05). Similarly, CA125 and CA19-9 were significantly higher in malignant group (p<0.05) (Table 1). When evaluated with the frozen section results, CA19-9 and NLR had the highest sensitivity to detect mucinous cancers (81 and 78 percent, respectively) (Table 2).

Conclusion: In patients who have an intraoperative frozen section diagnosis of borderline mucinous ovarian tumors, CA19-9, NLR and CA125 were significant predictors of malignancy. In light of larger future studies, we believe that integrating these parameters into routine clinical practice may decrease the rate of under diagnosis.

Keywords: Mucinous borderline tumor, frozen section, diagnosis, malignancy

[OP-117]

The determination of loneliness levels of woman with gynecological cancer

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Objective: This study is conducted to determine the issues and loneliness levels of women with gynecological cancer.

Material and Methods: The scope of this descriptive study is woman with gynecological cancer in the department of obstetrics and gynecology of a university hospital. The study was carried between April 2015 and June 2015, and 703 patients participated in the study, 294 of these patients were excluded because of reference again. Twenty percent of 409 patients were selected with simple random method (81 patients). Eleven of these 81 patients did not answer all questions in the questionnaire. Finally, 70 patients participated in the study. The data of the study was obtained through face to face interview technique. The informed consent was obtained from the ethics committee of Cukurova University. The questionnaire consists of two parts: sociodemographic characteristics that have 39 questions, and UCLA loneliness scale that measures loneliness levels. SPSS 15 software was used for data analysis. T-test and ANOVA test were used for statistical analysis.

Results: The main age of the women was 54.8±9.8 years old. The average score of UCLA-LS scale is 34.6±10.4. The degrees of lone-

liness of patients are: 60% of patients in low level, 30% of patients in moderate level, and 10% of patients in high level. There is statistical significance between marital status, educational status of husband, financial status that meet the costs of illness conditions and degree of loneliness ($p=0.039$, $p=0.011$, $p=0.049$, $p=0.002$ respectively). There is not statistical significance between educational status, disease symptoms, disease stage, type of treatment and degree of loneliness ($p=0.139$, $p=0.810$, $p=0.083$, $p=0.814$ respectively). There is not statistical significance between diagnosis, relationship with husband, sex life, reproductive action and degree of loneliness ($p=0.450$, $p=0.260$, $p=0.071$ respectively). There is statistical significance between diagnosis and motherhood/duty of her husband ($p=0.020$).

Conclusion: The loneliness level of women are associated with many factors. The using of psychological support, consulting services, and supporting factors will reduce the level of loneliness.

Keywords: Gynecological cancer, Endometrium cancer, loneliness, gynecological diseases

[OP-118]

Prognostic factors on endometrial cancer; how accurate?

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Table 1. Tumor characteristics of surgically treated 268 patients with endometrial cancer

	Patients (n)	%
Grade		
1	68	25.4
2	136	50.7
3	64	23.9
Stage		
1	221	82.8
2	16	6
3	29	10.8
4	3	1.1
Histological type		
Endometrioid	257	95.9
Non-endometrioid	11	4.1
Myometrial invasion		
< 1/2	155	57.8
> 1/2	113	42.1
Lymphovascular space invasion		
+	97	36.2
-	171	63.8

Table 2. Results of analysis; differences in disease specific, overall and progression free survival according to prognostic factors (5 year)

Prognostic factors	Overall survival		Disease specific survival		Progression free survival	
	(%)	P value	(%)	P value	(%)	P value
Age						
>50	0.853		0.85		0.811	
<50	0.857	0.817	0.89		0.864	0.789
Histological type						
Endometrioid	0.896		0.928		0.863	
Non-endometrioid	0.24	<0.01	0.246	<0.01	0.226	<0.01
Myometrial invasion						
> 1/2	0.751		0.856		0.736	
< 1/2	0.936	0.063	0.927	0.034	0.892	0.035
Tumor grade						
G1- G2	0.949-0.934		0.96-0.949		0.929-0.914	
G3	0.602	<0.01	0.635	<0.01	0.542	<0.01
Lymphovascular space invasion						
LVSI -	0.93		0.975		0.921	
LVSI +	0.75	<0.01	0.75	<0.01	0.680	<0.01
Tumor size						
>2 cm	0.84		0.872		0.787	
<2 cm	0.853	0.341	0.88	0.666	0.839	0.312

Objective: The aim of the study reported here is to assess the effect of the prognostic factors on overall, disease specific and progression free survival in endometrial cancer.

Material and Methods: This was a single center retrospective clinic study. We evaluated 308 patients with endometrial cancer diagnosis. Surgery was performed correspondingly clinical staging and preoperative evaluation. The pathology specimen was reassessed by one specialist. Age, lymphovascular space invasion, myometrial invasion, histologic subtype, grade and tumor size was assessed. The effect of prognostic factor on overall survival, disease specific survival and progression free survival was estimated according to Kaplan-Meier and Cox proportion analysis.

Results: The mean follow up is 42 months. Grade scoring was done in two classified system as one group consist of G1 and G2 and the other group G3. Histologic subtype was divided as endometrioid and non endometrioid type. The statistically significant independent variables affecting disease specific survival and progression free survival were histologic subtype, grade and lymphovascular space invasion. Myometrial invasion has also influence on survival. Tumor size and age did not effect survival in our study. While classifying patients these results should be considered as it would be useful for choosing adjuvant therapy and follow-up.

Conclusion: LVSI is an independent factor on both progression free survival and overall survival besides the only independent factor in disease specific survival. While planning postoperative treatment LVSI status should be evaluated. These patients should be considered at high risk for recurrence. These patients are candidates for aggressive adjuvant

treatment and frequent follow-up. Beside LVSI grade and histologic type are indepent risk factors on survival. But grade should be assessed in two classified system to have better interpretation of results and having more simplified and effective system.

Keywords: Endometrial cancer, prognostic factor, survival

[OP-119]

Colposcopic evaluation of pre and postmenapausal women with abnormal cervical cytologies

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Objective: We aimed to evaluate the efficacy of conventional cytology by comparing the results of colposcopic biopsies to detect precancerous lesions in pre and postmenopausal women with abnormal cervical cytologies.

Material and Methods: Between January 2010 -December 2014 we reviewed retrospectively patients who underwent colposcopic examination in clinic of obstetrics and gynecology of Bakirkoy Dr Sadi Konuk Teaching and Research Hospital. The women evaluated according to menopausal status, abnormal cervical cytologies and colposcopic examination results. NCSS (Number Cruncher Statistical System) for statistical analysis was used.

Table 1. The relationship between cervical cytology and colposcopy findings

	Colposcopy	Cervical cytology Benign	ASCUS	ASC-H	LSIL	HSIL
Premenopause	Benign, no biopsy	354 (83.1)	373 (64.1)	10 (33.3)	101 (48.8)	7 (16.7)
	CIN I	62 (14.6)	169 (29)*	9 (30)	85 (41.1)*	9 (21.4)
	CIN II&III&SCC	10 (2.3)	40 (6.9)	11 (36.7)	21 (10.1)*	26 (61.9)
	Total	426 (100)	582 (100)	30 (100)	207 (100)	42 (100)
Postmenopause	Benign, no biopsy	113 (87.6)	120 (77.4)*	5 (35.7)	27 (71.1)*	5 (20)
	CIN I	14 (10.9)	28 (18.1)	1 (7.1)	10 (26.3)	6 (24)
	CIN II&III&SCC	2 (1.6)	7 (4.5)	8 (57.1)	1 (2.6)	14 (56)
	Total	129 (100)	155 (100)	14 (100)	38 (100)	25 (100)
p-value		a0.468	a0.007**	b0.223	a0.032*	b0.889

aPearson Ki-kare test bFisher Freeman Halton test *p<0.05 **p<0.01 ASCUS;Atypical squamous cells - unknown significance, ASC-H;Atypical squamous cells where a high-grade lesion cannot be eliminated, LSIL; Low-grade squamous intraepithelial lesion, HSIL; High-grade squamous intraepithelial lesion, CIN;Cervical intraepithelial neoplasia. SCC;Squamosse cell carsinoma

Results: Patient population (n=1658) composed of 1289 premenopausal (77.7%) and 369 postmenopausal (22.3%) women. According to the results of cervical cytologies; benign ASCUS, ASC-H were not found statistically significant between two groups. LSIL; in premenopausal group, and HSIL in the postmenopausal group were found significantly higher (respectively p:0.006; p=0.002; p<0.01). When colposcopic results were evaluated; benign findings in postmenopausal women and CIN I in premenopausal women were found significantly higher (respectively p=0.001; p=0.001; p<0.05).When postmenopausal patients with ASCUS cytology were evaluated, benign biopsy rate was significantly higher in colposcopy, on the other hand, CIN I ratio was significantly higher in premenopausal group with ASCUS cytology (p: 0.007, p<0.01).When patients with LSIL were evaluated, normal biopsy rate in colposcopy was higher in postmenopausal patients, CIN I and CIN II-C III-SCC rates were found in highly significant in premenopausal patients (p=0.032; p<0.05).There is no significant difference between two groups in terms of ASC-H and HSIL.

Conclusion: Conventional cytology in postmenopausal patients compared with premenopausal patients seems to be less effective in detecting precancerous lesions therefore immediate colposcopy may be appropriate in postmenopausal women. Routine liquid based cytology and HPV screening can achieve clarity in this debate, Screening programs should be implemented effectively especially in postmenopausal group and further large scale studies are needed.

Keywords: Cervical cytology, menopause, colposcopy, precancerous cervical lesions

[OP-122]

Lymph node metastasis predictors in endometrial cancer; nomogram constructed by clinical and pathologic risk factors

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Objective: Lymphadenectomy is performed as a routine part of surgery by most of the gynecologic surgeons. However, several authors do not suggest it for clinically suspected early stage endometrial cancer because there is no randomized evidence showing a therapeutic evidence. Also, surgical morbidity or lymphoedema/lymphocyst formation risks are increased by performing lymphadenectomy. In addition, a considerable amount of pathology specimens from simple hysterectomy for benign diseases or endometrial hyperplasia include incidental endometrial cancer. The aim of the present study was to determine the clinical and pathologic risk factors for lymph node metastasis (LNM) in patients with endometrial cancer and to create a nomogram to predict LNM.

Material and Methods: All patients with endometrial adenocarcinoma who were treated surgically at a university based gynecologic oncology clinic between January 2011 and December 2014 were recruited in

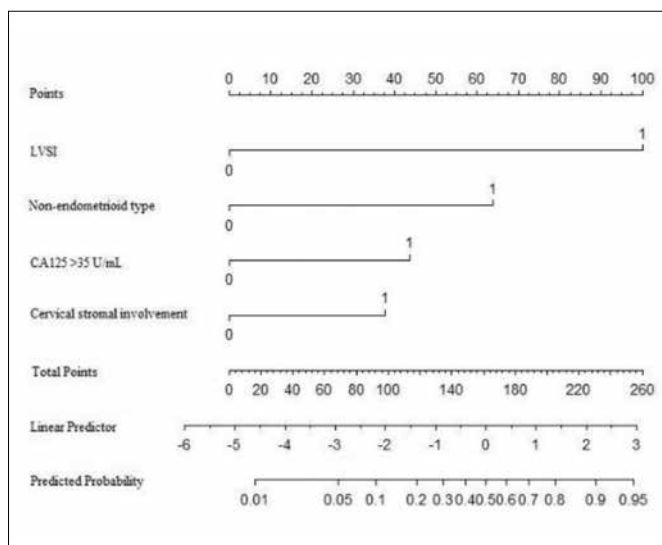
Table 1. Baseline characteristics and pathologic parameters of the study groups

	LNM (+) (n=31)	LNM (-) (n=248)	P
Age (years), mean±SD	62±13	61±10	0.657
CA125>35 U/mL, n (%)	15 (48.4)	20 (8.1)	<0.001
LVSI, n (%)	29 (93.5)	78 (32.6)	<0.001
Myometrial invasion ≥50%, n (%)	27 (87.1)	101 (40.9)	<0.001
Grade 3 disease, n (%)	20 (64.5)	49 (19.8)	<0.001
Non-endometrioid cell type, n (%)	9 (29)	17 (6.9)	0.001
Cervical stromal involvement, n (%)	16 (51.6)	21 (8.5)	<0.001
Tumor size >2 cm, n (%)	20 (74.1)	140 (70.7)	0.823

Table 2. Multivariate analysis of predictive factors for lymph node metastasis using logistic regression models

	OR	95% CI	P
LVSI	23.67	4.84-115.60	<0.001
Non-endometrioid	7.57	1.56-36.73	0.012
CA125>35 U/mL	3.99	1.32-11.97	0.014
Cervical stromal involvement	3.30	1.14-9.53	0.027

LVSI: lymphovascular space invasion; OR: odds ratio; CI: confidence interval

**Figure 1. Nomogram for the prediction of LNM based on the final model**

this retrospective cohort study. Women with endometrial adenocarcinoma who were surgically staged including lymphadenectomy were included in the study. The patients with other uterine malignancies with sarcoma, leiomyosarcoma and carcinosarcoma were excluded. Data regarding clinical and pathologic risk factors were recorded. The pathology slides from the staging surgeries were re-evaluated microscopically by a gynecologic pathologist for all parameters along with lymphovascular space invasion (LVSI).

Results: A total of 279 patients with endometrial cancer were analyzed. Among those, 31 (11.1%) had lymph node metastasis. According to the

univariate analyses elevated CA 125 (>35 U/mL), LVSI, myometrial invasion ≥50%, Grade 3 disease, non-endometrioid type, and cervical stromal involvement were significantly associated with LNM (Table 1). The multivariate logistic regression analysis showed that LVSI, non-endometrioid type, elevated CA 125, and cervical stromal involvement increased the risk of LNM (Table 2). However, myometrial invasion and grade did not significantly affect the risk of LNM. The nomogram constructed from the final multivariate model is presented in Figure 1. For a given patient, points are assigned to each of the predictor variables in the nomogram and a total score is derived from the sum of present variables. The optimal cut-off for total point that we get any patient was calculated as 92. This cut off value (0.10) points out the line at which the sensitivity is 0.968 and specificity is 0.674.

Conclusion: LVSI is the most important predictor for LNM. The present nomogram can be used to decide adjuvant therapy for patients with incidentally attained endometrial cancer diagnosis and to decide lymphadenectomy if frozen section for LVSI is available in clinically suspected early stage endometrial cancer patients.

Keywords: Endometrial cancer, lymph node metastasis, lymphovascular space invasion, nomogram

[OP-123]

Comparison of the outcomes of optimal cytoreductive surgery achieved in stage IIIC serous papillary epithelial ovarian cancer at different centers: is experience important?

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Objective: There has been a slight improvement in ovarian cancer survival in parallel to the advances both in surgical techniques and chemotherapeutic regimens; however, five-year survival rate still re-

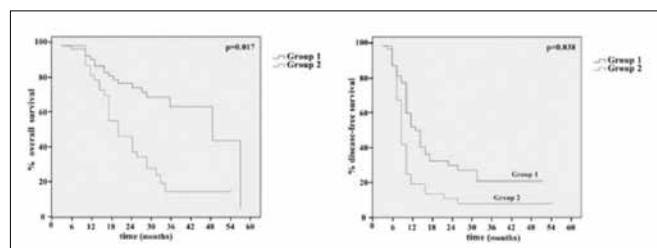
**Figure 1. Disease-free and overall survival for both groups**

Table 1. Demographic and operative characteristics of the groups

	Group 1 (n=49)	Group 2 (n=33)	p
Age (years)*	49.59±9.01	52.87±9.66	0.201
Parity*	2±1.69	2.12±1.49	0.937
Preoperative Ca125 level (IU/mL)*	1012±1560.19	654±899.7	0.342
Ascites (n, %)			
+	22 (44.9%)	17 (51.5%)	0.556
-	27 (55.1%)	16 (48.5%)	
Cytology (n, %)			
+	30 (61.2%)	22 (66.7%)	0.616
-	19 (38.8%)	11 (33.3%)	
Neoadjuvant chemotherapy			
(n, %) +	2 (4.1%)	1 (3%)	0.804
-	47 (95.9%)	32 (97%)	
The number of lymph nodes removed (n, %) **			
Pelvic	26 (0-60)	19 (0-47)	0.026
Lower paraaortic	6 (0-19)	3 (0-13)	0.021
High paraaortic	4 (0-21)	2 (0-12)	0.029
The number of positive lymph nodes (n, %) **			
Pelvic	2 (0-20)	0 (0-19)	0.001
Lower paraaortic	0 (0-12)	0 (0-5)	0.034
High paraaortic	0 (0-6)	0 (0-4)	0.028
The number of total lymph nodes**	38 (0-82)	30 (0-71)	0.015
Omentum volume (cm ³)*	909.53±226.14	785.77±266.97	0.017
Grade (n, %)			
1	-	-	
2	12 (24.5%)	12 (36.4%)	0.247
3	37 (75.5%)	21 (63.6%)	
Ca125 level after adjuvant treatment (IU/mL)*	37.65±83.81	48.77±59.72	0.293
Recurrence (n, %)			
+	38 (77.6%)	32 (97%)	0.023
-	11 (22.4%)	1 (3%)	
Recurrence Ca125 level (IU/mL)*	309.81±327.3	233.12±225.83	0.571
Secondary cytoreduction (n, %)			
+	24 (49%)	16 (48.5%)	0.965
-	25 (51%)	17 (51.5%)	
Current status (n, %)			
Alive	30 (61.2%)	6 (18.2%)	0.001
Dead	19 (38.8%)	27 (81.8%)	
The total follow-up time*	51.82±26.96	46.88±20.49	0.570

*Values were given as mean±standart deviation **Values were given as median, minimum/maximum

mains far less than the desired. Survival not only depends on the stage and type of the tumor, but also on the surgical experience, resectability of the tumor, and the ability of patient to tolerate extensive surgery. The aim of the present study was to compare recurrence and survival rates of gynecologic oncology patients, who were operated by experienced gynecologic oncologists, with recurrence and survival rates

of patients, who underwent optimal cytoreductive surgery in a center not designated as a specific oncology center.

Material and Methods: The study included 82 patients with FIGO Stage 3C serous papillary ovarian cancer that underwent optimal cytoreductive surgery between 2001 and 2015. The centers were divided into two groups, as designated experienced clinics providing gynecologic oncology training (Group 1) and non-academic centers that do not provide training (Group 2). The study compared surgical parameters, recurrence rates, and overall and disease-free survival rates between the groups.

Results: The median duration of follow-up was 51 months in Group 1 (min: 4 months, max: 113 months) and 46 months in Group 2 (min: 13 months, max: 106 months). Demographic data, operative data and comparisons are provided in table 1. The median disease-free survival was 16 months (1-101 months) in Group 1 and 9 months (4-106 months) in Group 2 (p=0.038). The median overall survival was 51 months (4-113 months) in Group 1 and 35 months (13-106 months) in Group 2 (p=0.017) (Figure 1). During the follow-up period, 19 patients (38.8%) in Group 1 and 27 patients (81.8%) in Group 2 died from disease.

Conclusion: The treatment of ovarian cancer requires a multidisciplinary approach (involving a surgeon, pathologist, medical oncologist, chemotherapy nurse, etc.). Optimal surgery is of particular importance to successful treatment and requires a close collaboration between gynecologic oncologist and surgical oncologist. The results of the current study emphasize the importance of optimal surgery as well as surgical education and experience in the treatment of ovarian cancer.

Keywords: Optimal cytoreduction, ovarian cancer, surgical experience, survival

[OP-124]

The outcomes of fertility-sparing surgery in epithelial ovarian cancer

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Objective: Although conservative surgery has long been discussed as a treatment option in women with ovarian cancer at reproductive age, current guidelines recommend conservative surgery only in selected patients. There is a recent interest on pregnancy and delivery rates after fertility-sparing surgery (FSS), and there are ongoing studies on this subject. The aim of the present study was to evaluate survival and pregnancy outcomes in patients that underwent FSS at various centers.

Material and Methods: The present retrospective study included 19 patients, who underwent fertility-sparing surgery due to invasive epithelial ovarian cancer between 2002 and 2014.

Results: The median duration of follow-up was 59.5 months (range 10-152 months). The mean age was 26.89±5.57 years (range 18-38

Table 1. Baseline characteristics and pathologic parameters of the study groups

Patient	Age	Parity*	Histology	Grade	Surgery	Stage
1	29	0	Endometrioid	1	USO+Omm+BPPALND	1A
2	26	0	Serous	2	USO+Omm+BPPALND+APP	1C
3	27	0	Endometrioid	2	USO+Omm+BPPALND	1A
4	24	1	Serous	1	USO+Omm+BPPALND+APP	1A
5	21	1	Endometrioid	1	USO	1A
6	33	0	Endometrioid	2	USO+Omm+BPPALND	1C
7	24	0	Mucinous	2	USO+Omm+BPPALND+APP	1A
8	29	0	Endometrioid	1	USO+Omm+BPPALND	1A
9	24	0	Mucinous	1	USO+Omm+PL	1A
10	18	0	Serous	1	USO+Omm+BPPALND	1A
11	38	0	Endometrioid	1	USO+Omm+BPPALND+APP	1A
12	27	0	Serous	1	USO+Omm+BPPALND+APP	1A
13	19	0	Mucinous	1	USO+Omm+BPPALND	1C
14	33	0	Serous	1	USO+Omm+BPPALND+APP	1A
15	27	1	Mucinous	1	USO+Omm	1A
16	30	1	Mucinous	1	USO+Omm+BPPALND+APP	1C
17	23	0	Mucinous	1	USO+Omm	1A
18	22	0	Endometrioid	1	USO+Omm+BPPALND	1C
19	37	0	Serous	1	USO+Omm+PL	1A

*Before initial diagnosis, USO: unilateral salpingo-oophorectomy; Omm: omentectomy; BPPALND: bilateral pelvic-paraaortic lymphnode dissection; PL: pelvic lymphnode dissection; APP: appendectomy

years). Fifteen patients (78.9%) were nulliparous. The mean Ca125 level at the time of diagnosis was 193.4 ± 161.7 U/ml (range 25-550). Of these patients, 6 (31.6%) had serous ovarian tumor, 6 (31.6%) had mucinous tumor, and 7 (36.8%) had endometrioid tumor. Of the patients, 14 had stage 1A tumor (73.7%) and 5 (26.3%) had stage 1C tumor. Clinical and histopathological characteristics of the patients are summarized in Table 1.

Five patients placed on paclitaxel+platinum-based adjuvant chemotherapy (Ctx). Of these patients, 2 (40%) received 4 cycles of chemotherapy and 3 patients (60%) received 6 cycles of chemotherapy. None of these patients underwent second look surgery. Following FSS, 10 full-term pregnancies and 3 spontaneous abortions occurred in 7 patients (36.8%). No congenital abnormality was reported in any of the babies. Ten patients (52.6%) underwent prophylactic surgery after a median duration of 49 months (range 16-119 months). Intra-operative and follow-up data of the patients are summarized in Table 2. During a median follow-up period of 59.5 months (range 10-152), 2 patients (10.5%) developed recurrent disease after prophylactic surgery. The patient number 2 underwent repeat surgery 2 years after primary surgery due to recurrent disease in the pelvic area. This surgery involved TAH + USO + PABPLND + Total Omm. The patient died 7 months after the second surgery. The patient number 16 had a live birth 24 months after primary surgery and complementary surgery was performed. The patient developed widespread recurrent disease 32 months after primary surgery for which a secondary cytoreductive surgery was performed. The patient died 43 months after primary surgery.

Conclusion: Accurate staging in patients with early stage epithelial ovarian cancer and regular follow-up of the patients has shown prom-

Table 2. Operative and follow-up results of the patients

Patient	The number of pelvic lymph nodes removed	The number of paraaortic lymph nodes removed	The number of live birth after surgery	Prophylactic surgery at x months	Recurrence	Follow-up (months)
1	19	2	-	-	No	13
2	21	20	-	-	Yes	29
3	18	12	2	47	No	63
4	31	20	1	49	No	52
5	-	-	-	-	No	28
6	12	4	1	29	No	137
7	21	-	-	-	No	43
8	30	5	-	-	No	28
9	9	-	2	62	No	120
10	10	5	-	-	No	45
11	24	12	-	37	No	59
12	19	9	1	-	No	48
13	14	10	2	119	No	125
14	56	12	-	70	No	87
15	-	-	-	-	No	25
16	25	2	1	16	Yes	43
17	-	-	-	-	No	25
18	25	10	-	-	No	10
19	11	5	-	59	No	152

ising reproductive outcomes. In light of the current data, conservative (fertility-sparing surgery) needs to be taken into consideration in selected patients with stage I epithelial ovarian cancer. However, there is still no consensus on the selection criteria of eligible patients for fertility-sparing surgery.

Keywords: Epithelial ovarian cancer, fertility-sparing surgery, surgical staging

[OP-126]

The efficacy of preoperative positron emission tomography-computed tomography (PET-CT) for detection of lymph node metastasis in endometrial cancer

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In this study, we aimed to analyse the prediction of preoperative positron emission tomography-computed tomography (PET-CT) for detection of lymph node metastasis in endometrial cancer.

60 with endometrial cancer were imaged with 18F-fluoro-2-deoxy-D-glucose-positron emission tomography/computed tomography before lymphadenectomy. We evaluated the diagnostic performance of 18F-fluoro-2-deoxy-D-glucose-positron emission tomography/computed tomography for detection of bilateral iliac lymph nodes and para-aortic lymph nodes. All of the patient's materials were evaluated using the final pathological diagnoses as the golden standard.

We calculated the sensitivity, specificity, positive predictive value and negative predictive value of 18F-fluoro-2-deoxy-D-glucose-positron emission tomography/computed tomography in endometrium cancer patients.

After comparing the results of pathological and PET-CT, we found left and right iliac lymph nodes' sensitivity % 85, specificity % 100, positive predictive value % 100 and negative predictive value % 98 and para-aortic lymph nodes' sensitivity % 50, specificity % 100, positive predictive value % 100 and negative predictive value % 96.

The efficacy of positron emission tomography/computed tomography regarding the detection of lymph node metastasis in endometrial cancer might be high enough to evaluate pelvic lymph nodes but not para-aortic lymph nodes because of low sensitivity.

Keywords: Positron-emission tomography, diagnostic imaging, lymphatic metastasis, endometrium cancer, clinical oncology

[OP-127]

A comparative study of FIGO 1988 versus 2009 staging for endometrial carcinoma

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Objective: The aim of this study was to investigate the benefit of new revised The International Federation of Gynecology and Obstetrics (FIGO) 2009 system and whether there was a difference in new system comparison to 1988 FIGO staging system for endometrial carcinoma.

Material and Methods: A total of 132 patients who were performed complete surgical staging for endometrial cancer were enrolled retrospectively. Those patients' overall survival and disease free survival were compared with 1988 and 2009 staging system.

Results: The five year overall survival (OS) rates for patients with 1988 FIGO stage 1 and 2 were 97% and 100%, respectively. In 2009 system the OS rates for 1 and 2 were 97% and 100%, respectively. There was no statistically significant difference between stage 1 and stage 2 for OS rates in 1988 and 2009 as well.

Conclusion: New revised system could be less complex for understanding but it does not discriminate survival rates better; especially in earlier stages. A new staging system and uniform surgical staging could be discussed.

Keywords: Endometrial carcinoma, FIGO staging, overall survival and disease free survival rate

Table 1. Survival analysis of old stage and new stage

old stage	n	5 years overall survive rate (%)	Disease free survival rate (%)	SD%	new stage (n)	5 years overall survive rate (%)	Disease free survival rate (%)	SD%
Stage 1	99	97	88	2	107	97	87	2
Stage 2	11	100	81	18	7	100	86	12
Stage 3	22	49	21	12	18	37	7	14

[OP-128]

Impact of thrombophilic gene mutations on postoperative thrombosis risk in patients with malign and benign gynecologic conditions: a prospective study

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Objective: To investigate thrombosis risk and impact of thrombophilic gene mutations in gynecologic benign and malign conditions.

Material and Methods: Fifty-three patients who underwent surgery because of malign reasons between January and December 2012 were involved. Forty-five patients with gynecologic benign conditions were randomized as control group. Patients having thrombosis history in the background and family and tendencies towards thrombophilia, heart failure, using oral contraceptive, antiaggregant drugs, hormone replacement therapy, tamoxifen and glucocorticoids, were excluded. All patients were followed for 6 weeks post-operatively regarding thrombosis. According to Modified Caprini risk assessment model for venous thromboembolism in general surgical patients, thrombosis prophylaxis protocol was given. Age, operation indication, existence of thrombosis history in patients or in their families, body mass index, duration of stay in the hospital, postoperative antiaggregant use, smoking, type and stage of malignancy of patients were recorded. Peripheral venous blood samples were drawn in preoperative period in order to evaluate the existence of factor V Leiden (FVL) and prothrombin gene (PTG) mutation.

Results: PTG mutation was detected in 2 (1.9%) patient in malignancy group, it was found in 2 (4.3%) patients in control group ($p=0.596$). FVL mutation was detected in 2 patients in both groups (3.8% in malign group, 4.3% in benign group, $p=0.596$). Thromboembolism occurred in one (1.9%) patient diagnosed with advanced stage endometrium cancer, no thrombosis development were observed in control group.

Conclusion: Preoperative FVL and PTG mutation scanning on patients operated with benign and malign indications does not have additional contribution to clinical practice.

Keywords: Thrombosis, factor V Leiden, prothrombin, gene mutation, postoperative

[OP-129]

Questioning the efficacy of uterine factors to determine lymphatic spread in endometrioid endometrial cancer: overtreatment is the main issue

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Objective: Endometrial cancer (EC) has been surgically staged since 1988, however there is a continuing debate over the limits of surgery regarding the necessity of lymph node dissection. Recent studies have shown that using surgicopathological factors for intraoperative decision making are sensitive enough to find the patients with lymphatic spread but not specific, thus related with unnecessary lymphatic dissections in most cases. In this study we aimed to evaluate the efficacy of major uterine factors to determine lymphatic spread and to describe a model for prediction of lymph node metastasis in EC.

Material and Methods: This retrospective study included patients with EC who underwent surgery at Department of Gynecologic Oncology of Etlik Zübeyde Hanım Teaching and Research Hospital from January 1993 to December 2015. Inclusion criterion was having systematic pelvic and paraaortic lymph node dissection and endometrioid type of EC according to permanent paraffin section. Patients with evidence of intraperitoneal tumor spillage clinically or pathologically were excluded. Chi-square test was used to evaluate the relation between uterine factors and lymphatic spread. ANOVA test was used to assess the association between FIGO grade and tumor size.

Results: 368 patients were included. The mean age of the study group was 59 years (range; 37- 83 years). Mean tumor size in the study group was 41 mm (range: 4-335 mm) and 307 (83.4%) had tumors larger than 2 cm. 14 patients (3.8%) had no myometrial invasion whereas 168 (45.7%) had < ½ myometrial invasion and 186 (50.5%) had >= ½ myometrial invasion depth. 127 (34.3%) had FIGO grade 1 histology, 166 (45.1%) had grade 2 and 75 (20.4%) had grade 3 disease. 55 (14.9) patients were found to have lymphatic metastasis. Univariate analysis showed that tumor size and depth of myometrial invasion but not FIGO grade was related with lymphatic spread (Table 1). Multivariate model analysis using various configurations of these uterine factors also revealed that histological grading was not suggestive of lymph node metastasis independent of myometrial invasion depth and tumor size (Table 2).

Conclusion: In our series of 368 endometrioid EC patients with comprehensive staging, we showed that 85% of patients had negative lymph nodes which means most patients with endometrioid histology underwent an unnecessary and potentially morbid procedure. Only 30% of patients with deep myometrial invasion, tumor size larger than 4 cm and grade III disease were found to have positive lymph nodes with the use of multivariate high risk model (Table 2). These results

Table 1. The relationship between tumor size, depth of myometrial invasion, FIGO grade and lymph node metastasis

Factors	Positive lymph node metastasis (%)	p value
Tumor size		
<=2 cm	4.9	0.016
>2 cm	16.9	
Depth of myometrial invasion		
No invasion	0	<0.0001
Myometrial invasion < 1/2	7.7	
Myometrial invasion >= 1/2	22.6	
FIGO grade		
1	15.7	0.131
2	11.4	
3	21.3	

Table 2. Lymph node metastasis according to configuration of tumor size, depth of myometrial invasion and FIGO grade

Tumor size	Depth of myometrial invasion	FIGO grade	Number of patients (metastatic/total)	Lymph node metastasis (%)
<= 2 cm	No invasion	1	0/2	0
<= 2 cm	No invasion	2	0/5	0
<= 2 cm	No invasion	3	-/-	-
<= 2 cm	Myometrial invasion < 1/2	1	0/7	0
<= 2 cm	Myometrial invasion < 1/2	2	0/18	0
<= 2 cm	Myometrial invasion < 1/2	3	0/18	10
<= 2 cm	Myometrial invasion >= 1/2	1	1/7	14,3
<= 2 cm	Myometrial invasion >= 1/2	2	1/9	11,1
<= 2 cm	Myometrial invasion >= 1/2	3	0/3	0
> 2 cm	No invasion	1	0/4	0
> 2 cm	No invasion	2	0/2	0
> 2 cm	No invasion	3	0/1	0
> 2 cm	Myometrial invasion < 1/2	1	5/48	10,4
> 2 cm	Myometrial invasion < 1/2	2	4/66	6,1
> 2 cm	Myometrial invasion < 1/2	3	3/19	15,8
> 2 cm	Myometrial invasion >= 1/2	1	14/59	23,7
> 2 cm	Myometrial invasion >= 1/2	2	14/66	21,2
> 2 cm	Myometrial invasion >= 1/2	3	12/42	28,6

can be interpreted as the inaccuracy of current dependence on uterine factors for the decision of lymphatic dissection and underlies the urgent need for further research to develop new models for selecting patients with possible nodal spread who may possibly benefit lymphadenectomy.

Keywords: Endometrial cancer, lymphadenectomy, nodal metastasis, surgical decision making

[OP-130]

The impact of tumor size on predicting lymph node metastasis in endometrial carcinoma

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Objective: Lymph node metastasis (LNM) has an important influence on survival in endometrial carcinoma (EC) and LNM occurs about 5-15%. If the LNM group of patients predicted before or during surgery, then the remaining patients could avoid exposure to lymph node dissection (LND). Tumor size (TS) is one of risk factors associated with lymph node spread and we aimed to evaluate the impact of TS on predicting LNM during surgery.

Material and Methods: Patient chart information of 40 patients who had been treated by surgical staging and applied frozen section per-operatively at Ankara Oncology Education and Research Hospital due to EC between July 2014 and March 2016 were retrospectively reviewed. Factors that were likely to have an effect on LNM in all patients, such as histological type, grade (G), myometrial invasion (MI), cervical invasion and TS were analyzed. Patients were separated into three groups and TS was studied as >2 cm, >3 cm and >4 cm related to LNM defined as risk groups.

Results: The mean age of the patients was 59.09 ± 9.14 years (range 38-79, median 59). Three patients had LNM (7.5%) out of 40 surgically staged EC patients. The stages were seen as 75% (n=30), 7.5% (n=3), 5.0% (n=2), 5.0% (n=2), 5.0% (n=2), 2.5% (n=1) according to the 2009 International Federation of Gynecology and Obstetrics (FIGO) stages IA, IB, II, IIIA, IIIC1 and IIIC2. There were 28 (70.0%), 21 (52.5%) and 11 (27.5%) patients, as TS >2 cm, >3 cm and >4 cm, respectively. All patients with <=2 cm TS (n=12, 30.0%) were stage IA and all patients with LNM (n=3, 7.5%) were >3 cm TS.

Conclusion: In this study, in EC patients with <=3 cm TS (47.5%) showed no LNM. Tumor size might have a value in predicting LNM and deciding LND in EC during surgery.

Keywords: Endometrial cancer, tumor size, lymph node metastasis

Objective: Cervical cancer is common among women worldwide. Most cases occur in developing countries. Cervical cancer screening are used to detect precancerous lesions and early-stage disease. Conventional PAP smear test is the most performed screening modality in clinical practice. The prevalence of cervical cancer in our country was detected as 4.6/100.000 in 2013 by The Turkish Public Health Organization and The Society for Fighting Against Cancer. Also, cervical cancer was determined as the 9th most frequent cancer in our population. Here we aimed to investigate the distribution of abnormal cervical cancer screening results in different age groups.

Material and Methods: A total of 6536 women who attended to the gynecology outpatient clinics of our tertiary care center between June 2014 and December 2014 were included in this study. Cervical screening results which has been interpreted by the experienced gynecopathologists in our hospital according to the Bethesda Classification were analyzed retrospectively. Women with a history of prior questionable screening result, an immunosuppressive status, and women who were referred to our institution after an abnormal screening had been detected in another institution were excluded from the study.

Results: The ages of included patients ranged between 17 and 90 (Table 1). The report of unspecified atypical squamous cells (ASC-US) was more frequent in patients older than 65 years, and secondarily in the 40-49 age range. The atypical squamous cells indistinguishable from high grade lesion (ASC-H) was mostly reported in patients whose ages ranged between 40 and 49. Low-grade squamous intraepithelial lesion (LSIL) was seen mostly in patients between the ages of 50 and 65 years. The participants with both atypical glandular cells (AGC) and high-grade squamous intraepithelial lesion (HSIL) were more frequent in patients between the ages of 40 and 65 years, concurrently. Squamous cell cancer was mostly encountered between the ages of 40 and 65 years, while adenocarcinoma was predominantly seen between the ages of 30 and 39 years.

Conclusion: Because of the high prevalence of abnormal screening results beyond 30 years of age, it is a need that a policy should be implemented to put forth an age range specifically designed for individuals in our country. Currently, various multi-center studies are carried on to find out an optimal screening strategy.

Keywords: Abnormal test, cancer, cervical screening

Table 1. The distribution of screening results regarding different age groups

Screening Result	< 21 years (n=68)	21-29 years (n=961)	30-39 years (n=1625)	40-49 years (n=1777)	50-65 years (n=1853)	> 65 years (n=252)
Normal/ Inflammatory cytology	65 (95.6)	926 (96.4)	1562 (96.1)	1658 (93.3)	1750 (94.4)	232 (92.1)
ASC-US	2 (2.9)	29 (3)	47 (2.9)	94 (5.3)	75 (4)	15 (6)
ASC-H	0	1 (0.1)	1 (0.1)	4 (0.2)	0	0
AGC	0	1 (0.1)	1 (0.1)	2 (0.1)	2 (0.1)	0
LSIL	1 (1.5)	4 (0.4)	8 (0.5)	11 (0.6)	17 (0.9)	2 (0.8)
HSIL	0	0	4 (0.2)	7 (0.4)	7 (0.4)	0
Squamous cell cancer	0	0	0	1 (0.1)	1 (0.1)	1 (0.4)
Adenocarcinoma	0	0	2 (0.1)	0	1 (0.1)	2 (0.8)

AGC, atypical glandular cells; ASC-H, atypical squamous cells indistinguishable from high grade lesion; ASC-US, unspecified atypical squamous cells; HSIL, high-grade squamous intraepithelial lesion; LSIL, low-grade squamous intraepithelial lesion. Values were given as number (percentage)

[OP-131]

The distribution of abnormal cervical cancer screening results in different age groups: A tertiary center experience

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[OP-132]

Cytoreductive surgery in advanced stage germ cell tumors of ovary

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Objective: To evaluate the survival effect of cytoreductive surgery in advanced stage germ cell tumors (GCT) of ovary.

Material and Methods: Clinicopathological data of patients with ovarian GCT that were treated between 1991 and 2014 were retrieved from the computerized database of Etlik Zübeyde Hanım Teaching and Research Hospital. The Kaplan-Meier method was used to estimate overall survival (OS) and disease free survival (DFS), and survival differences were analyzed by the log-rank test. Maximal debulking was defined as no gross residual tumor after primary or recurrence surgery; optimal and suboptimal debulking were used for patients with residual tumors of ≤ 1 cm and > 1 cm, respectively.

Results: In total, 106 patients with GCT were analyzed. There were 31 patients with advanced stage disease. The mean age at diagnosis was 23.4 (± 9.7) years. The median follow-up duration was 50 months (range, 1-243 months). According to FIGO 2014 Ovarian Cancer Staging system; 13 patients were stage IIIA1, 3 patients were stage IIIB, 14 patients were stage IIIC and one patient was stage IVB. Of these 31 patients; 7 patients underwent sub-optimal debulking, 5 patients had optimal surgery and 18 had maximal debulking. In follow-up period, 5 patients had recurrence and 3 patients died from disease. 3 of 5 patients with recurrent disease had sub-optimal surgery, 1 had optimal surgery and 1 had maximal debulking procedure. Five-year DFS according to surgical resection rates were 57.1% in suboptimal debulking group, 75% in optimal debulking group and 93.3% in maximal cytoreduction group ($p=0.017$) (Figure 1). Three of seven patients who underwent sub-optimal debulking were died of disease, however no deaths were seen in patients with optimal and maximal debulking. Five-year OS was 32.1% in suboptimal debulking group, and 100% in optimal and maximal debulking groups ($p=0.001$) (Figure 2).

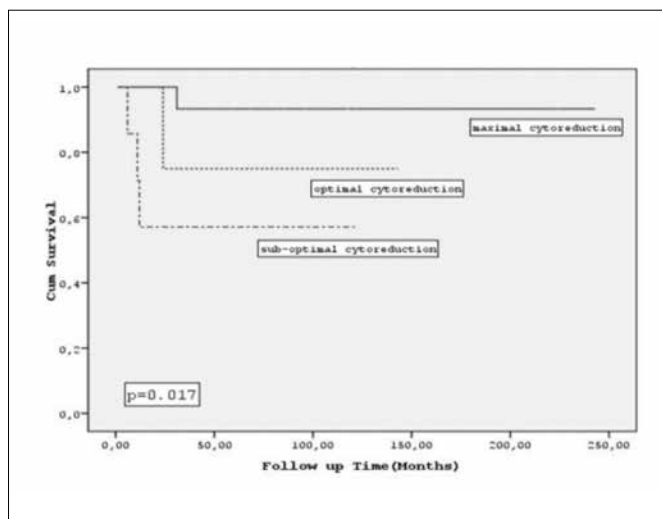


Figure 1. Disease free survival in advanced stage germ cell tumor of ovary

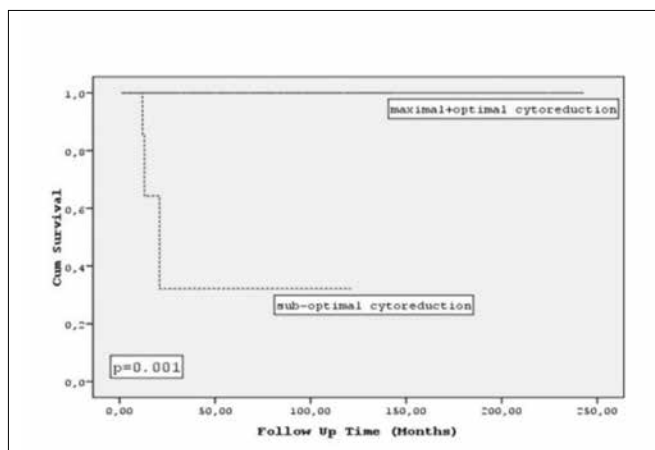


Figure 2. Overall survival in advanced stage germ cell tumor of ovary

Conclusion: The benefit of cytoreductive surgery is less well-established in GCT of ovary compared to ovarian tumors of epithelial origin due to rareness of this histological subtype. Patients with GCT are usually younger and preservation of fertility is an important issue which may lead to suboptimal procedures, sometimes in exchange for diminished survival. Our data demonstrated that maximal cytoreduction should be aimed in patients with advanced stage GCT, as it is significantly associated with improved overall survival. Although germ cell tumors are very sensitive to chemotherapy and there is an established consensus of treating residual disease with chemo cycles to sustain fertility, initial maximal surgical effort may stand for a matter of life and death in patients with advanced stage GCT.

Keywords: Germ cell tumor, cytoreductive surgery, survival

[OP-133]

Evaluation of patients with atypical squamous cells-cannot exclude high-grade squamous intraepithelial lesion for histological diagnosis of cervical intraepithelial neoplasia of grade 2 or more severe disease

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Objective: To estimate predictors for histological diagnosis of cervical intraepithelial neoplasia of grade 2 or more severe disease (+CIN 2) in patients with atypical squamous cells-cannot exclude high-grade squamous intraepithelial lesion (ASC-H) on cervical cytology.

Material and Methods: We retrospectively reviewed the patients with ASC-H who had undergone colposcopic biopsy between the years 2007-2015. Age, parity, menopausal status, marriage status, smoking habitus, high risk Human Papilloma Virus (HR-HPV) status were investigated for diagnosis of +CIN 2 in colposcopy-guided biopsy. The forward likelihood ratio method was used and significance was set at $p < 0.05$.

Results: 93 patients with ASC-H were undergone colposcopy-guided bioopsy. Mean age of the patients was 39.37 ± 1.03 (20-63) and 32 (36.8%) were smokers. HPV test was performed to 30 patients and 10

(33.3%) were HR-HPV positive (+). Histologic diagnosis were reported as normal in 44 (47.3%), CIN 1 in 10 (10.8%), CIN 2 in 24 (25.8%), CIN 3 in 12 (12.9%) and cervical cancer in three (3.2%) patients. Mean age of +CIN 2 patients were 41.13 ± 10.45 compared with 36.92 ± 8.61 for patients with less severe disease ($p:0.042$). Nine of 10 (90%) HR-HPV (+) patients and 18 of 32 (56.2%) smokers had +CIN 2 lesions whereas two of 20 (10%) HR-HPV negative (-) patients and 18 of 55 (32.7%) non-smokers had +CIN 2 lesions (p values were, <0.001 and 0.03 for HR-HPV and smoking status respectively). According to regression analysis (+) HR-HPV test was the only predictor [vs. (-) HR-HPV test; OR 6.351; 95% CI 3.673–8.947, $p=0.014$].

Conclusion: Colposcopic evaluation, biopsy sampling and histological diagnosis should be performed carefully for ASC-H patients, especially if they are HR-HPV positive.

Keywords: ASC-H, cervical cancer, Colposcopy, HPV, Leep

[OP-134]

Isolated brain involvement in endometrium cancer from case report to meta-analysis: Different face of neuro-invasion from endometrium cancer

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Objective: The aim of this meta-analysis is to evaluate treatment options and post-brain involvement survival (PBIS) of patients with isolated brain involvement from endometrium cancer (EC).

Material and Methods: The literature electronic search was conducted from 1972 to January 2016 to identify articles about isolated brain recurrence after initial treatment of EC and only brain involvement from EC at the initial diagnosis. Forty-seven articles were found. After comprehensively evaluation of case series and case reports, the study included 42 cases. Eleven patients (26%) had isolated brain involvement from EC at initial diagnosis, 31 (74%) had isolated brain recurrence. Subgroup analysis was performed in 26 patients with brain recurrence from endometrioid type EC.

Results: The median age of the patients at initial diagnosis was 57 years. Type of tumor was endometrioid in 35 patients. Poor differentiation were determined in 30 patients (71.4%). Twenty-nine patients (69%) had single brain lesion. Lesion was found in supratentorial part of the brain in 30 patients (71.4%). Median PBIS for all cohort was 12 months (range; 0.25 to 85 months) with 2-year PBIS 51%. Age, tumor type, grade, disease-free interval, diagnosis time of brain involvement, localization and number of brain lesion didn't predict PBIS. 2-year PBIS was 32% higher in recurrent patients compared to patients who

Table 1. The factors predicting post brain involvement survival in all cohort and in patients with isolated brain recurrence from endometrioid type adenocarcinoma

Characteristics		All cohort n= 42		Patients with brain recurrence from EAC, n=26	
		2-year PBIS (%)	p value	2-year PBIS (%)	p value
Age at initial diagnosis ¹	<57 years	55	0.491	65	0.197
	≥57 years	46		39	
Tumor type	Endometrioid	49	0.666	-	NC
	Non-endometrioid	60		-	
Grade	1 & 2	83	0.606	83	0.642
	3	51		49	
Diagnosis time of brain lesion	Initial diagnosis	27	0.087	-	NC
	Recurrence	59		-	
Disease free interval ¹	<10 months	42	0.341	34	0.331 ²
	≥10 months	57		68	
Localizations of brain lesion	Supratentorial	59	0.970	55	0.110
	Infratentorial	None		None	
	Both	50		-	
Number of brain lesion	Single	56	0.177	55	0.353
	Multiple	33		30	
Therapy for brain lesion	Only surgery	19	0.002*	None	0.027*
	Surgery+radiotherapy	87		90	
	Only surgery	19	0.430	None	0.098
	Only radiotherapy	20		25	
	Surgery+radiotherapy	87	0.139	90	0.147
	Surgery+radiotherapy+chemotherapy	60		75	
	Only radiotherapy	20	0.003*	25	0.012*
	Surgery+radiotherapy	87		90	
	Surgery	60	0.048*	68	0.056
	Therapy without surgery	21		25	

PBIS: Post brain involvement survival; BR: Brain recurrence; EAC: Endometrioid type adenocarcinoma; NC: No compared; 1: Median value, 2: Disease free interval in patients with BR in EAC; Median value 13 months (<13 months vs. ≥13 months), * $p<0.05$

had brain involvement at initial diagnosis (59% and 27%, respectively). This result was a statistically trend toward significance ($p=0.087$). Patients who underwent surgery for brain lesion had higher PBIS than those without surgery ($p=0.048$). 2-year PBIS was 87% in patients who underwent surgical resection and radiotherapy, while it was 19% in only surgical resection group, and 20% in only primary radiotherapy group ($p=0.002$ and $p=0.003$, respectively). Chemotherapy didn't improved PBIS. PBIS for patients with BR from endometrioid type EC was 52% in subgroup analysis. Age, tumor type, grade, disease-free interval, localization and number of brain lesion did not predict PBIS similar with all cohort. The results of treatment were similar with all cohort except the patients who had surgical therapy as a part of treatment compared with patients who treated without surgery ($p=0.056$). Results of survival was shown in table 1 in detail.

Conclusion: Even though neuro-invasion from EC appears mostly as a late event and with a disseminated disease, there are a considerable amount of patients with isolated brain involvement who would have a higher chance of curability. This meta-analysis showed that survival after brain involvement in isolated brain recurrence is better than those with isolated brain involvement at the initial diagnosis. Surgery with radiotherapy is the rational current management option and this improves the survival for isolated brain involvement from EC.

Keywords: Endometrium cancer, Isolated brain recurrence, Neuro-invasion, Post-brain involvement survival

[OP-135]

Analyzing patients who are positive for high risk human papilloma virus other than types 16 and 18

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Objective: To investigate cytologic and histologic outcomes of patients who test positive for high risk human papilloma virus (HR-HPV) other than types 16 and 18.

Material and Methods: We reviewed clinical and pathological features of patients who test positive for HR-HPV other than types 16 and 18 between 2007-2015 at Baskent University Hospital in Ankara. We used real-time polymerase chain reaction (PCR) using a commercial kit

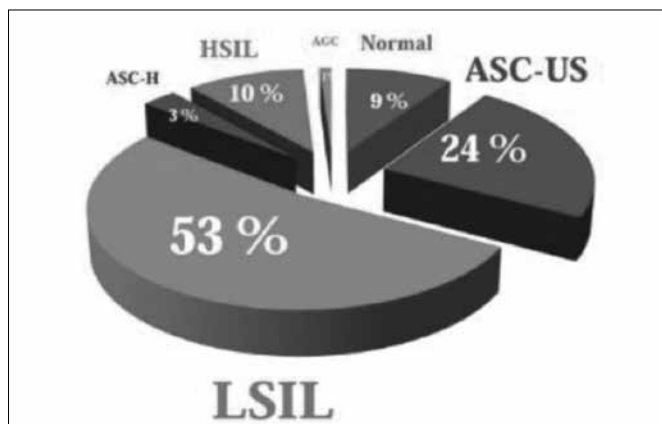


Figure 1. Cytologic outcomes of patients who are positive for high risk human papilloma virus other than types 16 and 18

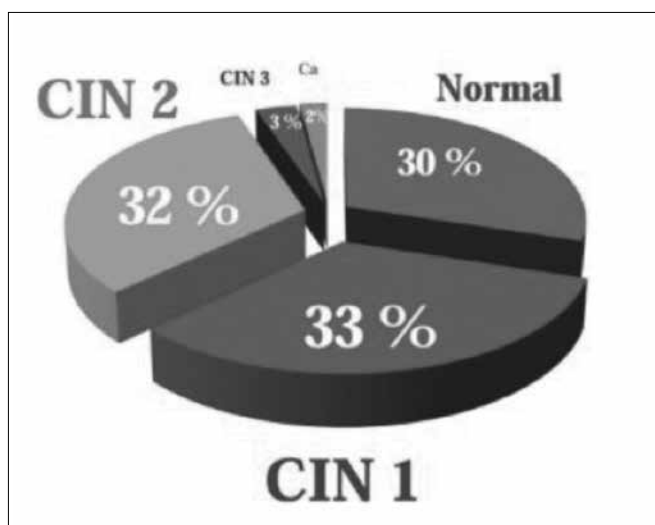


Figure 2. Histologic outcomes of patients who are positive for high risk human papilloma virus other than types 16 and 18

(Fluorion, Iontek, Turkey). Patients were positive for any of the following HPV types 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66 and 68 in the cervical smear samples. All patients were undergone cytology testing and colposcopy guided biopsy.

Results: 97 patients were included in the present study. Median patient age was 34 years (25th–75th percentiles: 22–46 years) and 55.7% were nullipar. Cytology was abnormal in 88 (81.7%) patients (Figure 1). Histologic diagnosis showed that 29 (29.9%) patients had normal results however 37 (38.1%) patients had cervical intraepithelial neoplasia grade 2 or more severe disease (Figure 2).

Conclusion: Majority of patients who are positive for HR-HPV other than types 16 and 18 have cytologic abnormalities however they have normal or low grade cervical premalignant lesions.

Keywords: Cervical cancer, colposcopy, cytology, HPV, Leep

[OP-136]

Colposcopy-guided punch or loop biopsy for each grade of abnormal epithelial cytology

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Objective: To compare the detection rates of cervical intraepithelial neoplasia of grade 2 or more severe disease (+CIN 2) using colposcopy-guided punch and loop biopsy for guidance in choosing the colposcopic biopsy method for each grade of abnormal epithelial cytology.

Material and Methods: Between 2007 and 2015, 1231 women with atypical squamous-cells of undetermined significance (ASC-US); low-grade squamous intraepithelial lesions (LSILs); atypical squamous cells, cannot exclude high-grade squamous intraepithelial lesions (ASC-Hs); or high-grade squamous intraepithelial lesions (HSILs) randomly underwent either punch biopsy or loop biopsy. Detection rates for +CIN 2 using both methods were investigated using the chi-square or Fisher's exact test.

Results: For HSIL, loop biopsy achieved a higher +CIN 2 detection rate relative to punch biopsy (81.8% vs 53.3%; $p<0.001$). However both biopsy methods had similar +CIN 2 detection rates for ASC-US (17.4% vs 16.4%; $p=0.851$), LSIL (27.6% vs 26.5%; $p=0.835$) and ASC-H (44.0% vs 26.2%; $p=0.295$). The biopsy methods achieved similar +CIN 2 detection rates in HR-HPV+ abnormal epithelial cytologies with the exception of HSIL (94.3% vs 66.7%; $p=0.02$).

Conclusion: As loop biopsy had higher +CIN2 detection rates, it should be preferred for patients with HSIL. Addition of HR-HPV test to cytology did not support the use of a specific biopsy method.

Keywords: Cervical cancer, colposcopy, HPV, Loop

[OP-137]

Area under the curve of estradiol monitorisation: A novel approach to evaluate detrimental effect of estrogen exposure on implantation along the COH: A prospective data analyses

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Objective: The aim of this study is to assess the utility of area under the curve of estradiol monitorisation during ART cycles to predict failure of implantation and clinical pregnancy.

Material and Methods: Area under the curve of estradiol monitorisation during ART cycles were compared between the age and BMI matched groups of infertile women with (n=109) and without (n=173) successful embryo implantation.

Results: Comparison of groups with and without positive clinical implantation showed a significant difference between the groups in terms of area under the curve of estradiol monitorisation, estradiol per day and the endometrial thickness at trigger day ($p=0.05$). Additionally, comparison of groups with and without positive clinical pregnancy showed a significant difference between the groups in terms of area under the curve of estradiol monitorisation, estradiol per day and the endometrial thickness at trigger day ($p=0.05$).

Conclusion: Calculation of the area under the curve of estradiol monitorisation during ART cycles may be used to predict failure of implantation and clinical pregnancy and may be used to select candidates for freeze all policy.

Keywords: Area under the curve of estradiol monitorisation, artificial reproductive techniques, implantation, clinical pregnancy

[OP-138]

Is there a relationship between ovarian reserve tests with depression and anxiety scales

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Objective: The aim of the present study was to investigate whether there was an association between ovarian reserve tests and depression and anxiety scales.

Material and Methods: A total of 50 women with primary infertility were eligible for the study. Anti-mullerian hormone, follicle stimulating hormone, luteinizing hormone and estradiol levels were assessed for establishing ovarian reserve. All participants completed standardized questionnaires assessing depression (Beck Depression Inventory) and anxiety (Beck Anxiety Inventory).

Results: Both depression and anxiety scores were positively correlated with age, body mass index (BMI), duration of infertility, and diminished ovarian reserve ($p<0.05$). Regression analyses showed that lower AMH levels ($p<0.001$), higher BMI ($p<0.05$) and longer duration of infertility ($p<0.05$) were the predictors of both higher depression and anxiety scores.

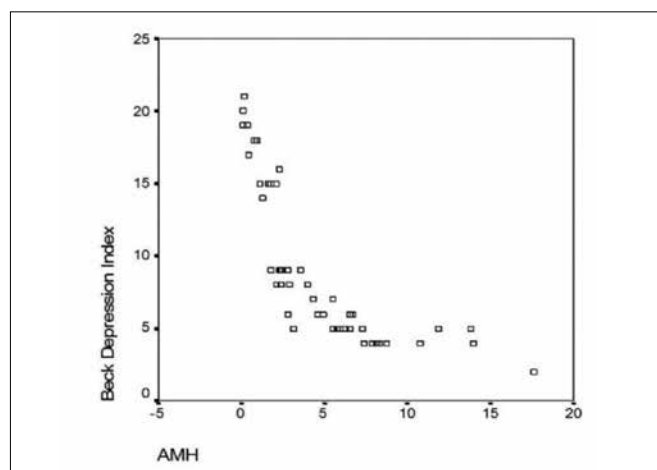


Figure 1. Distribution of BDI scores with regard to AMH levels

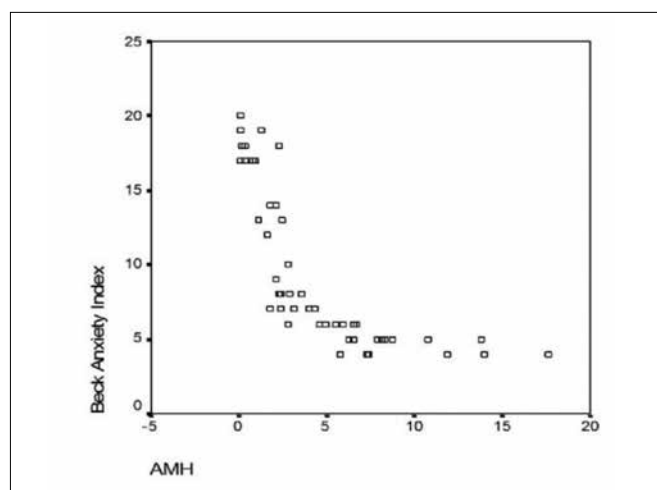


Figure 2. Distribution of BAI scores with regard to AMH levels

Table 1. Demographic, clinical and psychological characteristics of the participants

Characteristics	n=50
Age (years)	27.8±5.0
Duration of infertility (months)	29 (12-96)
Employee	8 (16.0%)
BMI (kg/m ²)	26.2±4.7
FSH	4.8 (1.7-32.0)
LH	5.7 (1.4-49.0)
E2	47.0 (13.0-131.0)
AMH	3.3 (0.1-17.6)
BDI	7.5 (2.0-21.0)
BAI	7.0 (4.0-20.0)

Conclusion: The data of the present study have established that higher depression and anxiety scores were associated with poor ovarian reserve as well as higher BMI and longer duration of infertility, suggesting that psychological support is needed for this group of women.

Keywords: Depression, anxiety, ovarian reserve, infertility

[OP-139]

Assessment of semen quality in patients with androgenetic alopecia in an infertility clinic

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Background: Androgenetic alopecia (AGA) is a common cause of hair loss in men. It is associated with the risk of cardiovascular disease and metabolic syndrome. Additionally, it is suggested that premature AGA could be considered equivalent to that of polycystic ovary syndrome in women.

Objective: The aim of this study was to examine the relation between AGA and the quality of semen.

Material and Methods: The semen specimens were collected from 203 young adult men included in the study. AGA was classified according to the Hamilton baldness scale, modified by Norwood. All participants were classified into two categories: normal to mild AGA (equivalent to Norwood types I-II) as Group I and moderate to severe AGA (equivalent to Norwood types III-VII) as Group II to assess the difference in the quality of sperms between the two groups.

Results: There were no statistically significant differences in the men's age and body mass index scores among the groups. For both Groups I and II, the history of smoking and varicocele was not statistically different ($p = 0.62$ and $p = 0.11$, respectively). All parameters of sperm including volume, density, motility, and morphology were significantly lower in participants with moderate to severe AGA than those with normal to mild AGA ($p < 0.01$, $p < 0.01$, $p < 0.01$, and $p < 0.01$, respectively).

Conclusion: This study showed that young adult men with moderate to severe AGA have poor quality of semen compared with those who have normal to mild AGA.

Keywords: Androgenetic alopecia, male infertility, semen, sperm parameters

Table 1. Sperm parameters of the subjects and controls

	Group 1 mean±s.d.	Group 1 min.-max.	Group 2 mean±s.d.	Group 2 min.-max.	p
Semen volume (ml)	2.8±1.2	0.5-7.5	2.3±1.5	0.0-8.0	0.002
Sperm count (x10 ⁶ /ml)	59.1±62.3	0-470	36.5±56.8	0-275	0.000
Rapid progressively motile sperm (%)	40.5±16.6	0-81	23.2±19.3	0-67	0.000
Slow progressively motile sperm (%)	18.5±11.4	0-57	12.5±10.4	0-40	0.000
Morphologically normal sperm (%)	8.4±6.7	0-54	4.1±4.2	0-21	0.000

[OP-142]

Comparison of pregnancy rates between patients with and without local endometrial scratching before intrauterine insemination

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Objective: In this study, our aim was to determine the implantation success of local endometrial injury on the patients who had intrauterine insemination following ovulation induction with gonadotropins as infertility treatment.

Material and Methods: The study was included 80 patients who referred Gynaecology and Obstetrics Clinic of Atatürk University Hospital because of infertility; between June 2013 and December 2013. The study was programmed as prospectively, randomised and controlled. All the patients were well informed as verbal and inscribed. The patients who were discordant to the criteria determined at the beginning of the study were excluded. The patients in all groups who had not any pathological problems determined with ultrasonography (USG) on the third day of menstrual cycle, had started to ovulation induction with gonadotropins (gonal-F 900 pen 75IU subcutan). Women in the intervention group underwent local endometrial injury (scratch) in midluteal phase (day 21-25 of cycle) of the cycle preceding ovarian stimulation. The scratch was performed by the same investigator, with novack curette, to the posterior side of endometrial cavity under sterile conditions. When the dominant follicle (18mm and above) arised after ovulation induction with gonadotropins, HCG (ovitrelle 1*1 subcutan) was administered all of the patients in two groups and ovulation was performed. 36 hours after the ovulation, intrauterine insemination was performed to the patients by the same investigator. The patients who had not underwent intrauterine insemination or whose cycle were canceled because of any reason, were excluded

from the study. The patients were evaluated about pregnancy with B-HCG levels and USG

when their menstruation was delayed. In the 5-7. weeks of pregnancy, transvaginal ultrasound was used again to designate fetal heartbeat, for the determination of clinical pregnancy.

Results: In our study, 80 different patients undergoing intrauterine insemination were included. They divided in to two groups; 40 women in intervention and 40 women in control group. In the intervention group, 15 pregnancies (37.5%) and 11 clinical pregnancies (27.5%); in the control group 8 pregnancies (20%) and 5 clinical pregnancies (12.5%) were obtained from every 40 patients in two groups. The pregnancy and the clinical pregnancy rates were increased in the intervention group, but no statistically significant difference was found between the intervention and control groups ($p=0.084$ for pregnancy rates and $p=0.094$ for clinical pregnancy rates).

No significant difference in patient age ($p=0.839$); primer or seconder infertility possession ($p=0.431$); mean duration of infertility ($p=0.376$); menstrual invention ($p=0.626$); the medical treatments performed before ($p=0.875$); the number of menstrual cycles which patients underwent medical treatment ($p=0.447$); mean total progressive motil sperm count ($p=0.153$) was found between the two groups.

Conclusion: Local endometrial injury (scratch) performing in the cycle preceding ovulation induction to the patients who has infertility diagnosis and intrauterine insemination indication, increased pregnancy and clinical pregnancy rates; but this increase was not statistical significant. However, more randomised and controlled, prospective studies including too many patients are required before iatrogenic induction of local endometrial injury can be warranted in routine clinical practice.

Keywords: Infertility, insemination

[OP-143]

Evaluation of endometrial receptivity by measuring HOXA-10, HOXA-11, and LIF expression in patients with polycystic ovary syndrome

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Objective: Polycystic ovary syndrome (PCOS) could lead to a decrease in the endometrial HOXA-10 and HOXA 11 expressions HOXA 10 and HOXA 11 are proteinous products of homeobox gene group and play an important role during implantation. The aim of this study was to evaluate endometrial receptivity by measuring HOXA 10, HOXA 11, and LIF gene expressions in women who had polycystic ovary syndrome.

Material and Methods: A total 53 women were included into this prospective randomized study. The patients were allocated to two groups: In group 1 (PCOS group), endometrial biopsy was taken from 33 patients. In group 2 (control group), endometrial biopsy was taken from 20 patients. All endometrial biopsies were taken during proliferative phase by using pipelle. HOXA-10, HOXA 11, and LIF expressions were measured in the endometrial sampling material. Demographic data of the patients such as age, obstetric and gynecologic history, medical conditions, medications, surgical history, last menstrual period were recorded.

Results: Mean age of the patients for PCOS and control groups were 31.27 and 38.17, respectively. There was no difference between the two groups in relation with gravida and parity. HOXA 10 and HOXA 11 levels were significantly lower in group 1 than group 2 ($p<0.05$). LIF levels were found to be significantly lower in group 1 than group 2 ($p<0.05$).

Conclusion: Our results shown that, PCOS might lead to a decrease in implantation rate by diminishing HOXA 10, HOXA 11, and LIF gene expressions.

Keywords: PCOS, infertility, HOXA 10, HOXA 11, and LIF

[OP-144]

The role of premature ovarian failure awareness in female sexual functions and distress

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Objective: Women with premature ovarian failure (POF) had higher frequency of sexual dysfunction than women of the same age with normal gonadal function. The diagnosis of POF is traumatic to young women, with loss of gonadal functions having been associated with distress and anxiety. There are doubts if manifestations are due to physical or psychosocial changes. To evaluate the sexual function of women with POF and investigate whether there is a relationship between androgen levels and sexual functioning at the time of diagnosis when women are unaware of the disease.

Material and Methods: In this cross sectional study, we evaluated SF through the "Female Sexual Function Index" (FSFI) and sexual distress with "Female Sexual Distress Scale- Revised (FSDS-R), a comparison between the POF and age matched controls using the Mann-Whitney test. Serum hormone measurements included estradiol, total testosterone, free testosterone, androstenedione, dehydroepiandrosterone, and dehydroepiandrosterone sulfate (DHEAS). Correlation analysis between androgen levels and FSFI domain scores were performed. Main outcomes measures: FSFI and FSDS-R.

Results: No significant differences between the two groups were found in the total score and domains of FSFI. The mean FSDS-R score was 15.3 (0-40) for the women in the POF group and 10.3 (0-33) for the women in the control group ($P = 0.06$). Women with POF had significantly lower levels androstendione and DHEAS levels than the control women. Desire domain weakly correlated with free testosterone levels in women with POF ($r=0.34$, $p<0.05$). Androstendione,

Table 1. Comparison between the different domains of sexual function and distress for women with premature ovarian failure and women with normal gonadal function using the Female Sexual Distress Score –Revised and Female Sexual Function Index

	POF group			Control group			p value
	Mean	SD	Median	Mean	SD	Median	
FSDS-R	15.3	12.4	13	10.3	10.3	6	0.06
Desire	3.3	1.1	3.6	3.7	1.1	3.6	0.1
Arousal	3.7	1.1	3.9	3.9	1.2	3.9	0.3
Lubrication	4.1	0.9	4.2	4.2	1.3	4.5	0.3
Orgasm	4.1	1.2	4.2	4.3	1.3	4.4	0.4
Satisfaction	4.0	1.5	4.8	4.1	1.8	5.2	0.07
Pain	4.3	1.3	4.0	4.7	1.5	4.4	0.6
Total FSFI	23.6	5.2	24.9	24.8	6.7	25.2	0.2

POF: premature ovarian failure; SD: standard deviation

Table 2. Androgen parameters of women with POF and control women

	POF		Control		p value
	Mean±SEM	Median	Mean±SEM	Median	
Testosterone* ng/ml	0.33±0.02	0.32	0.29±0.02	0.26	0.2
Free testosterone# nmol/l	1.22±0.13	1.35	1.50±0.17	1.43	0.4
FAI#	2.90±0.44	2.07	2.18±0.27	1.79	0.2
DHEA* ug/dl	557.02±68.70	472	443.8±30.89	383	0.4
DHEAS* ug/dl	170.65±10.41	170.60	218.45±12.90	212.80	0.03
Androstendione# ng/ml	0.54±0.05	0.59	4.45±2.59	0.69	0.03
SHBG# nmol/l	48.7±4.65	48.27	68.84±7.03	61.48	0.06

SHBG: sex hormone-binding globulin; FAI: free androgen index; SEM: standart error mean; DHEA: dehydroepiandrosterone; DHEAS: dehydroepiandrosterone sulfate; POF: Premature ovarian failure. *student t test; #Mann Whitney U test

testosterone, dehydroepiandrosterone and DHEAS were not correlated with FSDS-R, FSFI scores and domains

Conclusion: We failed to show a significant difference in sexual functions measured by FSFI and sexual distress between women with POF and normal gonadal function. Although women with POF had lower DHEAS and antrostendione levels, we did not show significant correlation with various aspects of sexual functioning and distress.

Keywords: Premature ovarian failure, female sexual dysfunction, androgens, female sexual function index, female sexual distress scale

[OP-145]

Non invasive prediction of implantation window in controlled hyperstimulation cycles:can the time from the menstrual day at embryo transfer to expected menstrual cycle give a clue ?”

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Objective: The aim of this study was to assess whether the time from the menstrual day at embryo transfer to expected menstrual cycle (TETEMC) is associated with the implantation in women with regular cycles or not.

Material and Methods: Forty women with successful implantation and forty women without implantation with regular cycles were randomly selected from prospectively collected database of ART clinic of Zeynep Kamil Women And Children's Health Training And Research Hospital. TETEMC was calculated for each case to assess relationship with the successful implantation.

Results: Comparison of groups revealed significant differences with regard to TETEMC and the menstrual period ($p<0.05$). In ROC analyses both the TETEMC (AUC=0.824, $p<0.001$) and the menstrual period (AUC=0.797, $p<0.001$) were significant predictors for clinical pregnancy. Cut off value for the menstrual period was found to be 27.5 days with 82.6% sensitivity and 65% specificity. Cut off value for TETEMC was 11.5 days with 75% sensitivity and 63.2% specificity.

Conclusion: Longer menstrual cycle and the TETEMC seem to be associated with the implantation failure.

Keywords: Controlled hyperstimulation, endometrial receptivity, implantation window

[OP-146]

Seasonal variation of human sperm cells among 4422 semen samples: A retrospective study in Turkey

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Objective: We aimed to investigate the possible presence of a seasonal pattern in three parameters of semen analysis; sperm concentration, morphology and motility measured at the time of both ejaculation and sperm production (spermatogenesis) in men with normal and oligozoospermic sperm parameters.

Material and Methods: This retrospective study includes a consecutive series of 4422 semen samples that were collected from patients as a part of the basic evaluation of the infertile couples attending the Reproductive Endocrine Outpatient Clinic of a tertiary women's hospital in Ankara, Turkey, between January 1, 2012 and December 31, 2013 were retrieved.

The samples were classified according to sperm concentration: $>= 15 \times 10^6/\text{mL}$ as normozoospermic samples and $4 - 14.99 \times 10^6/\text{mL}$ as oligozoospermic samples and seasonal analysis of the semen samples were done separately.

Results: When the normozoospermic samples were analysed according to the season of semen production day (Table 1), there

Table 1. Comparison between the different domains of sexual function and distress for women with premature ovarian failure and women with normal gonadal function using the Female Sexual Distress Score –Revised and Female Sexual Function Index

Sperm parameters	Spring (n=159)	Summer (n=133)	Fall (n=187)	Winter (n=208)	P*
Volume (ml)	2.62±1.03	2.53±1.06	2.80±1.63	2.87±1.04	0.004
Concentration (M/ml)	10.80±3.04	10.41±2.91	10.13±2.94	10.62±3.01	0.134
Motility, total (%)	50.59±14.29	49.98±16.09	48.15±21.02	47.67±15.79	0.374
Motility, fast (%)	30.14±16.67	22.26±19.43	13.08±18.49	24.59±16.62	<0.001
Motility, slow (%)	20.45±12.51	27.72±16.27	35.07±21.03	23.08±14.59	<0.001
Morphology, (%)	9.14±7.02	6.86±6.78	5.06±5.99	7.63±6.02	<0.001

Table 2. Seasonal variations in Normozoospermic sperm samples by the day of semen production

Sperm parameters	Spring (n=930)	Summer (n=803)	Fall (n=1003)	Winter (n=999)	P*
Volume (ml)	2.66±1.08	2.78±1.23	2.87±1.54	3.02±1.07	<0.001
Concentration (M/ml)	2.66±1.08	51.06±27.46	50.32±28.66	51.52±28.95	0.442
Motility, total (%)	60.23±19.16	59.56±20.26	60.65±20.28	58.54±19.29	0.026
Motility, fast (%)	48.05±18.29	33.36±26.41	24.65±26.03	43.07±19.70	<0.001
Motility, slow (%)	12.17±5.93	26.20±23.97	36.01±25.71	15.47±11.79	<0.001
Morphology, (%)	15.55±9.07	11.62±9.24	8.94±7.73	13.45±8.20	<0.001

was no seasonal effect on the sperm concentration. In the analysis of the data, a gradual and consistent decrease in the rate of sperm with fast forward motility was observed from spring to fall. The spring produced sperm samples demonstrated an average \pm SD fast motility of $48.05 \pm 18.29\%$ whereas the fall produced samples presented a mean value of $24.65 \pm 20.03\%$ ($p=0.001$), with a recovery of fast sperm motility to $43.07 \pm 19.70\%$ observed in the winter samples. The percentage of sperms with normal morphology was found to be statistically significantly higher in the spring samples with a value of 15.55 ± 9.07 compared with summer samples (8.94 ± 7.73 , $p=0.001$). Oligozoospermic 687 semen specimens were also analysed according to the season of the semen production day, the mean age for the oligozoospermic patients was 32.11 ± 6.22 years (Table 2). Total motility was not affected by seasonal variations and the incidence of sperms with fast motility was highest during the sperms produced in spring and winter, ($30.14 \pm 16.67\%$ and $24.59 \pm 16.62\%$, respectively) and lowest during the fall: $13.08 \pm 18.49\%$ ($p=0.001$). The percentage of sperms with slow motility showed similar trends in both oligo and normozoospermic groups as slow motile sperms reached peak values during the fall, ie, 35.07 ± 21.03 and $36.01 \pm 25.71\%$ vs spring values of $20.45 \pm 12.51\%$ and $12.17 \pm 5.93\%$ ($p=0.001$) respectively. Similarly, the percentage of normal morphology according to Kruger cri-

teria results reached a peak value of 9.14 ± 7.02 during the spring, dropped to 5.06 ± 5.99 ($p=0.001$) during fall months and recovered to 7.63 ± 6.02 during the winter.

Conclusion: We found seasonal variation in sperm motility and percent sperm with normal morphology. Both normozoospermic and oligozoospermic semen samples had better sperm parameters in spring and winter. The circannual variation of semen parameters may be important in diagnostic and treatment decisions.

Keywords: Infertility, seasonal sperm pattern, sperm motility

[OP-147]

Can assisted reproductive therapy indications be influential on different fetal genders? Data from a tertiary care institution

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Objective: To investigate the differential effects of various ART (assisted reproductive techniques) indications on fetal gender.

Material and Methods: Eight hundred and eighteen patients who attended to the Assisted Reproduction Clinics of Zekai Tahir Burak Women's Healthcare Training and Research Hospital between January 2013 and January 2015 were included in this study. Cause of infertility, age, basal Follicle stimulating hormone (FSH) level, basal estradiol level, endometrium thickness on the day of human Chorionic Gonadotropin (hCG) administration, number of retrieved oocytes, fertilization ratio and clinical pregnancy outcome of the every patients were evaluated retrospectively.

Results: All of 818 patients who underwent ART procedures were divided into 4 groups with regard to ART indications. Ages, basal FSH levels, number of retrieved oocytes, fertilization rates and clinical pregnancy rates were significantly different among groups (Table 1). As a result of 228 live births, there were 118 (51.7%) female and 110 (48.3%) male babies. The ratios of neonatal genders were comparable among four groups ($p=0.853$) (Table 2).

Conclusion: Because our work is a result of a single center experience and all patients were evaluated by the same team and laboratory, the results provide more homogeneous aspects and inferences rather than a multi-center study. Genders of the offspring were determined after birth, and the gender of the conceptus who underwent spon-

Table 1. Clinical and laboratory parameters of the patients who had different causes of infertility

Characteristics	Male factor (n=403)	Tubal factor (n=16)	Unexplained (n=340)	Poor responder (n=59)	p value
Age (years)	28.65±4.56	27.88±3.14	30.95±4.37	33.54±5.03	<0.001 ^{a, b, c, d}
D3 FSH (mIU/mL)	6.57±1.86	6.71±1.11	6.37±2.06	8.11±2.58	<0.001 ^{c, d}
D3 Estradiol (pg/mL)	48.85±21.23	36.82±12.39	49.97±21.82	51.89±23.07	0.081
Endometrium thickness on the day of hCG administration (mm)	10.26±2.0	8.82±1.55	9.98±1.93	9.70±2.11	0.005 ^e
Retrieved Oocyte Number	10.28±4.89	12±5.86	10.35±5.60	6.08±3.94	<0.001 ^{a, c, d}
Number of Transferred Embryos [Median (Min.-Max.)]	1 (1-2)	1 (1-2)	1 (1-2)	1 (1-2)	0.001 ^b
Clinical pregnancy	164 (40.7%)	7 (43.8%)	121 (35.6%)	12 (20.3%)	0.019
Live birth	128 (31.8%)	6 (37.5%)	87 (25.6%)	7 (11.9%)	0.007

^aThe difference between the groups of tubal factor and poor responder is significant. ^bThe difference between the groups of male factor and unexplained infertility is significant. ^cThe difference between the groups of male factor and poor responder is significant. ^dThe difference between the groups of unexplained infertility and poor responder is significant. ^eThe difference between the groups of male factor and tubal factor is significant.

Table 2. The distribution of neonatal gender according to the causes of infertility

Gender of the neonate	Male factor (n=128)	Tubal factor (n=6)	Unexplained (n=87)	Poor responder (n=7)	p value
Female	65 (50.8)	4 (66.7)	45 (51.7)	3 (42.9)	0.853
Male	63 (49.2)	2 (33.3)	42 (48.3)	4 (57.1)	

taneous abortion could not have been determined, these represent limitations of our study.

Keywords: ART, gender, infertility, live birth

[OP-149]

Predicting value of anti-mullerian hormone in response to clomiphene citrate used for ovulation induction at women diagnosed with unexplained infertility

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Objective: The Objective of this study was to determine the predicting value of AMH levels in response to clomiphene citrate used for ovulation induction at women diagnosed with unexplained infertility and accepted as normoresponder according to FSH levels.

Material and Methods: This study was planned retrospectively. The study group consisted of primary infertile 100 patients between ages of 20-35, had regular menstruation, FSH levels <10 IU/mL, normal Hysterosalpingography, no endocrine disorders and applied to the infertility outpatient clinic at Etlik Zübeyde Hanım Women's Health

Training and Research Hospital between January-December 2014, to whom ovulation induction was applied with 100 mg (50 mg*2) clomiphene citrate on the 3rd day of menstruation for 5 days, after examination, and diagnosed with unexplained infertility. Patients were divided into two groups as consecutive 50 responders to clomiphene citrate (Group 1) and consecutive 50 non-responders (Group 2). Difference between the AMH levels of two groups, and predicting value of AMH levels in response to clomiphene citrate was investigated. Education Planning Board approval was obtained. The results were evaluated by SPSS Version 17 program with Descriptive Statistics, Student's T test, Mann Whitney U Test, Pearson Correlation Analysis, ANOVA Test, Bonferroni Correction and Receiver-Operating Characteristic (ROC) Curve Analysis. p<0.05 value was accepted as statistically significant.

Results: The average age of all patients was 27.1±4.3 (years), average body mass index (BMI) was 24.6±2.6, average FSH value was 6.5±1.3(IU / L) and average AMH value was 2.62±0.64 (ng/ml). Average age, BMI, LH, prolactin and TSH levels were similar among the groups (p>0.05). AMH and AFC values were significantly higher in Group 1 (respectively p=0.001, p=0.001). FSH and AFC values were negatively correlated with each other as statistically significantly (r=-0.339, p=0.001), AFC and AMH values were positively correlated with each other as statistically significantly (r=0.713, p=0.001). AFC and AMH levels were found to be significant in predicting response to clomiphene citrate. The AUC of the AMH level based on ROC curve was significantly higher than AUC of AFC levels, and AMH levels were more significant than AFC levels (Figure 1). We determined 2.78 (ng/ml) as the cut-off value (sensitivity 74%, specificity 86%) in predicting response to clomiphene citrate in patients with unexplained infertility (Table 1), and we found AMH was a more valuable marker than AFC (AUC was determined 0.862 and 0.792 for AMH and AFC, respectively).

Conclusion: AMH was found as a more valuable marker than AFC (AUC was determined 0.862 and 0.792 for AMH and AFC) in women with unexplained infertility. AMH levels may have an effect in success of the cure, although there is no infertility etiology with all current methods in unexplained infertility. In light of the results we have

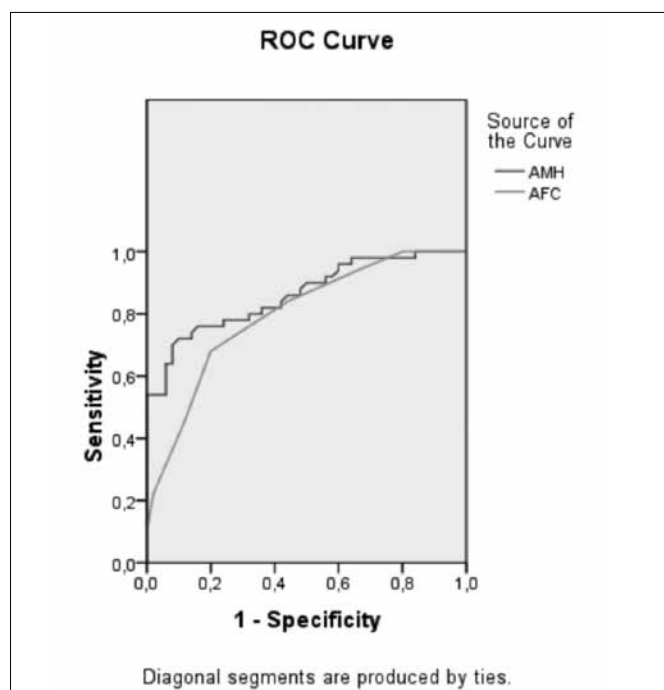


Figure 1. ROC curve of AMH and AFC values in terms of response to clomiphene citrate

Table 1. Sensitivity and Specificity rates for AMH values in predicting response to clomiphene citrate

AMH value (ng/ml)	Sensitivity	Specificity
2.72	0.76	0.80
2.75	0.76	0.84
2.78	0.74	0.86
2.80	0.72	0.86
2.82	0.72	0.88

obtained in our study, poor cycles can be minimized by evaluating in which patient group ovulation induction with clomiphene citrate would be successful. However; prospective randomized studies with more number of patients are needed to support of our study results.

Keywords: Anti Mullerian hormone, clomiphene citrate, unexplained infertility

[OP-150]

Does obesity really have any effect on ovarian reserve?

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Objective: In the accumulated literature, conflicting results from studies examining the relationship between obesity and ovarian reserve have been reported, as yet. Whereas various studies have demonstrated a significant reverse correlation, others have reported no relationship between ovarian reserve markers and obesity. We investigated whether obesity would adversely affect serum concentrations of ovarian reserve markers in women with different ovarian reserve status.

Material and Methods: A total of 402 infertile women who were attending The Reproductive Endocrinology Department at Hitit University Hospital between February and December 2015 were included in this prospective cross-sectional study. They were divided into three groups according to body mass index (BMI) (<25 kg/m²- nonobese, n=198, 25.0-29.9 kg/m²- overweight, n=126 and ≥30 kg/m²- obese group, n=78). They were also divided into two groups according to waist circumference (WC) (<80cm- nonobese, n=103 and ≥80 cm- obese groups, n=299). Additionally, all participants were categorized into three types of ovarian reserve patterns; normal ovarian group (n=146) included women with adequate reserve pattern and < 35 years of age, high ovarian group (n=112) included women with high reserve pattern and poor ovarian group (n=144) included women with diminished reserve pattern and/or ≥ 35 years of age. Serum antimüllerian hormone (AMH), estradiol (E2) and follicle stimulating hormone (FSH) levels were assayed and also compared in all ovarian reserve and obesity groups.

Results: The median age of normal reserve group was 29 years (18-34), those of high reserve group was 27.5 years (18-34) and those of poor reserve group was 36 years (20-45) (p<0.001). There was no significant differences of BMI and WC between three ovarian reserve groups (p=0.813 and p=0.065 respectively). There were statistically significant differences between all ovarian reserve groups at the aspect of AMH, E2, FSH (p <0.001). Comparisons of ovarian reserve parameters (AMH, FSH and E2) and obesity parameters (BMI and WC) revealed that there was no statistically difference in women with normal, high and poor ovarian reserve patterns.

Conclusion: We observed that the ovarian reserve parameters do not seem to be affected by increased BMI and WC. Because the devoid of relationship between obesity and AMH exists, AMH might be considered as a reliable marker of ovarian reserve.

Keywords: Ovarian reserve; antimüllerian hormone; amh; obesity; body mass index; waist circumference

[OP-151]

The effect of vitamin D on ovarian reserve markers

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Objective: We aimed to evaluate the hypothesis in which serum 25-hydroxycholecalciferol (25(OH)D) levels are correlated with ovarian reserve markers.

Material and Methods: This was a prospective cross-sectional study between February and December 2015 at Hitit University Hospital in Corum, Turkey. A total of 170 infertile participants met the inclusion criteria for the study. Blood samples of the participants were obtained for analyses of estradiol (E2), follicle stimulating hormone (FSH), total testosterone (TT), 17-hydroxy-progesterone (17(OH)P), dehydroepiandrosterone sulfate (DHEAS), antimüllerian hormone (AMH) and 25(OH)D in the early follicular phase on days 2 to 4. Comparisons and correlation analyses of data were performed.

Results: The mean age of the participants was 30.2 years (range 18-42) and the mean BMI was 26.2 kg/m² (range 18.7-43.3). 53% of participant women were overweight or obese according to BMI and 80.6% of participant women had abdominal obesity according to WC. The means of 25(OH)D and AMH were 8.8 ng/mL and 4.3 ng/dL respectively. The relationship between serum level of 25(OH)D and E2, FSH, TT, 17(OH)P and DHEAS was analyzed. No correlation between 25(OH)D and AMH was documented ($r=-0.033$, $p=0.666$).

Conclusion: Most of the studies favouring the positive effect of vitamin D on AMH production and secretion used markers of ovarian reserve/function rather than pregnancy rates as fertility outcome. Taken all together, it is highly likely that serum vitamin D has no association with serum AMH levels as a reliable ovarian reserve marker.

Keywords: Vitamin D, ovarian reserve, antimüllerian hormone, amh

[OP-152]

Does tenaculum use during intrauterine insemination effect pregnancy rate?

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Objective: In IVF cycles tenaculum application to the cervix just before embryo transfer has been related to lower pregnancy rates. The aim of the present study is to evaluate whether use of a tenaculum while introducing the catheter through the cervical canal during intrauterine insemination (IUI) effects pregnancy outcome.

Material and Methods: A total of 140 IUI cycles (CC/rFSH + IUI) done between May 2015 and February 2016 were studied. Results were evaluated in three groups according to degree of manipulation needed to introduce the catheter into the uterine cavity (Group 1 (n=51): IUI done easily with a soft catheter, Group 2 (n=50): IUI done with a rigid catheter, and Group 3 (n=39): IUI done with the use of a tenaculum). Clinical and laboratory parameters and pregnancy rates of the groups were compared.

Results: Demographic characteristics and laboratory parameters of the groups were similar (Table 1). Clinical pregnancy rate in the whole group was 10% (14/14). We could not find a statistically significant difference between the clinical pregnancy rates of the groups (11.8% vs. 10.0% vs. 7.7%, $p=0.812$).

Table 1. Demographic and clinical parameters of the study population

	Group 1 (n=51)	Group 2 (n=50)	Group 3 (n=39)	p value
Age (years)	26.75+4.84	26.20+5.17	28.51+3.91	0.064
BMI (kg/m ²)	24.84+3.09	24.09+3.77	23.96+3.55	0.416
Clinical pregnancy (%)	6 (11.8)	5 (10.0)	3 (7.7)	0.812
Duration of infertility (years)	3.39+2.29	3.68+2.54	4.32+3.50	0.380
FSH (IU/ml)	7.04+1.89	7.22+1.46	6.64+1.45	0.312
Peak E2 (pg/dl)	398.54+154.85	338.13+115.01	537.92+375.66	0.196
Number of dominant follicles	1.59+0.63	1.38+0.53	1.36+0.48	0.090
TMSS (X10 ⁶ /mL)	53.51+27.67	55.86+30.71	56.26+32.56	0.891
Endometrial thickness (mm)	8.75+1.37	8.89+1.52	8.8+1.69	0.867

Conclusion: Our results indicate that using tenaculum to ease the passage of the catheter through the cervical canal during IUI might not effect clinical pregnancy rate. However, our results need to be confirmed by further studies with larger number of patients.

Keywords: Clinical pregnancy rate, tenaculum, intrauterine insemination

[OP-153]

A retrospective analysis of patients who underwent preimplantation genetic diagnosis due to single gene defects: Our three years experience

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Objective: In this study, we aimed to determine the treatment results of patients who underwent preimplantation genetic diagnosis (PGD) due to single gene defects.

Material and Methods: The results of 29 cycles in 22 patients with 16 different single gene defect (SGD) were included into the analysis. The results of patients were evaluated retrospectively.

Results: HLA (Human leucocyte antigen) tissue typing was performed in 10 couples who underwent PGD. One hundred and thirty embryos were obtained in 13 cycles. Twenty-two of them were healthy and 18 were genetic mutation carriers. Embryo transfer could be performed in 10 cycles and 5 pregnancies with 4 live births were obtained. In twelve couples, in whom a SGD was detected in a single partner, PGD without HLA tissue typing was performed to prevent the transmission of the SGD to their offspring. One hundred and fourteen embryos were obtained in 14 cycles. Twenty-four of them were healthy and 25 of them were genetic mutation carriers. 22 embryos were transferred in 14 cycles and 10 pregnancies with 9 live births occurred.

Table 1. Retrospective analysis of patients

	PDF for both SGD and HLA matching	PDD for only SGD
Indications	Hemophagocytic lymphohistiocytosis, the Fanconi, Beta thalassemia, leukocyte adhesion defect, Hereditary multiple exocytosis,	Infatil types of polycystic kidney, gangliosidosis, beta thalassemia, epidermolysis bullosa, sick Krabbe., Mucopolysaccharidosis type 3B, Cockayne send., Mucopolysaccharidosis Type 6, Mucopolysaccharidosis type 5, Meckel-Gruber send., Cystic Fibrosis
Patients	10	12
Cycles	13	16
Oocytes	170	158
M2 oocytes	143	141
Embryos	130	114
Healthy embryos	22	24
Genetic mutation carrier embryos	18	25
Embryos with mutation	90	65
Transferred healthy embryos with HLA matching	6	-
Transferred Genetic mutation carrier embryos with HLA matching	8	-
Transferred healthy embryos without HLA matching	-	15
Transferred Genetic mutation carrier embryos with HLA matching	-	7
Clinic pregnancy per cycle with embryo transfer	5/10	10/14
Live birth per clinic pregnancy	4/5	9/10
PGD: Preimplantation Genetic Diagnosis, SGD: Single Gene Defects, HLA: Human Leukocyte Antigen		

Conclusion: PGD with in vitro fertilization allows the possibility of a healthy pregnancy for couples under the risk of transmitting SGDs to their offspring and it eliminates the risk of termination of pregnancy. With these advantages, it should be offered to couples with SGDs since it is shown to have similar pregnancy and live birth rates compared with other indications of in vitro fertilization. PGD is a life-saving procedure in some special cases.

Keywords: Preimplantation genetic diagnosis, single gene defects, HLA antigens

[OP-154]

Changing the protocol does not affect the outcome of in vitro fertilization in successive cycles

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Objective: Failure to conceive after the first cycle of in vitro fertilization (IVF), results with repeated attempts. However, choosing the best stimulation protocol in successive cycles of IVF in the same individual is hindered by the lack of information regarding outcome in successive cycles following utilization of the same or different stimulation protocols. This study was designed to investigate the outcome of in vitro fertilization in the same patient under the same and different stimulation protocols.

Material and Methods: We have examined the repeated cycles of 88 patients whose first cycle had not resulted with live birth. First group comprised of 66 patients underwent two consecutive cycles both stimulated with long agonist protocol. The second group included 22 patients whose first cycle was with long agonist protocol and their second cycle with antagonist protocol. These two groups were compared in terms of clinical pregnancy and live birth rates, M2 oocyte number, fertilization rates, embryo grade and number.

Results: The mean of the study population in terms of age was 29.3 ± 4.6 and BMI was 25 ± 4.2 . The indications for IVF were 52.3% male factor, 42% unexplained infertility, 3.4% poor ovarian reserve and 2,2% tubal factor. The results showed that there was no statistically significant difference in total gonadotropin dose, clinical pregnancy and live birth rates, oocytes retrieved, M2 oocyte number, fertilization rates, embryo grade and number between the groups ($p > 0.05$). The only statistically significant difference was in the second group in terms of duration of ovarian stimulation ($p = 0.032$) and peak serum estradiol (E(2) level ($p = 0.004$)).

Conclusion: This study demonstrated that changing the stimulation protocol does not have a statistically significant change in IVF outcome. Individual factors are more important than mode of stimulation in repeated cycles.

Keywords: IVF, outcome, successive cycle

[OP-155]

Impact of sperm morphology and progressively motile sperm count for pregnancy outcomes in intrauterine insemination

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Objective: To investigate the value of strict sperm morphology and progressively motile sperm count on initial semen analysis to predict an ongoing

pregnancy outcome in couples treated with intrauterine insemination (IUI).

Design: Prospective, observational study.

Material and Methods: The study comprised of 201 patients who underwent IUI at Zekai Tahir Burak Women's Health Care, Training and Research Hospital fertility outpatient clinic between 2014-2015. Forty seven patients underwent ovarian hyperstimulation with gonadotropins and 154 patients with clomiphene citrate. The primary outcome was clinical pregnancy per cycle. Receiver operating characteristics (ROC) curves and binary logistic regression analysis were used to determine the effectiveness of sperm morphology and progressively motile sperm count to predict clinical pregnancy in IUI cycles.

Results: The median sperm morphology was 8% (3-65%) and the median progressively motile sperm count 65.3 (48-907) in the study population. Binary logistic regression analysis showed that only sperm morphology to be an independent statistically significant predictor of clinical pregnancy per cycle (odds ratio=2.269; 95% CI, 1.116-4.613; $p=0.024$). In the analysis of the area under ROC curve was 0.759 (95%CI: 0.584-0.935) (p -value: 0.013) and the optimal cut-off point was 9.5% with a sensitivity of 70% and specificity of 81%.

Conclusion: Normal sperm morphology percentage higher than 9.5 increases the probability of clinical pregnancy.

Keywords: Intrauterine insemination, pregnancy outcomes, progressively motile sperm count, sperm morphology

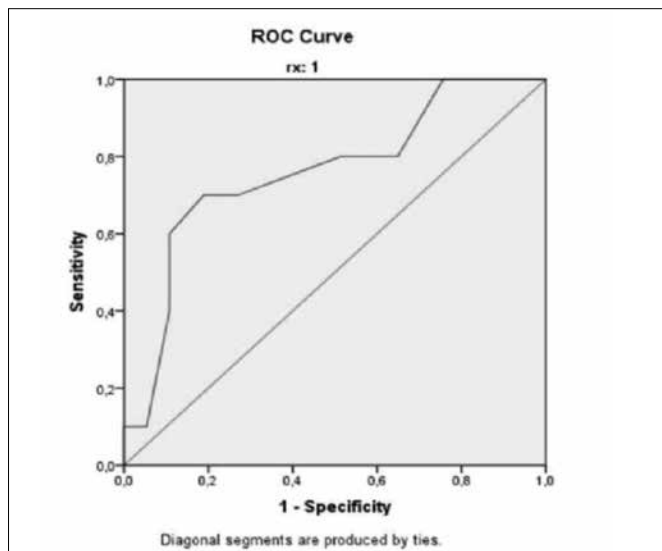


Figure 1. Receiver operating characteristics (ROC) curve of sperm morphology to predict clinical pregnancy in IUI cycles

[OP-156]

Does pituitary suppression effect live birth rate in women with hypogonadotrophic hypogonadism undergoing intra-cytoplasmic sperm injection; a multicenter cohort study

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Objective: Only a small proportion of patients that need assisted reproductive technologies (ART) are idiopathic hypogonadotrophic hypogonadism (HH). Due to rarity of the disorder, just a few studies have evaluated ART outcomes of those patients. Unfortunately, none of them have evaluated the optimal stimulation protocol and luteal support that should be commenced. We aimed to answer following questions; What is the success rate of intra-cytoplasmic sperm injection (ICSI) cycles in patients with idiopathic HH compared to patients with tubal factor infertility and optimal controlled ovarian stimulation (COS) protocol for that group of patient?

Material and Methods: A retrospective multicenter cohort study were performed with using database of five academic ART centers. Patient files and computer-based electronic data were scrutinized to identify women with idiopathic HH that had undergone ICSI between January-2010 and December-2014. The inclusion criteria were age less than 40 years, serum LH level <1.2 IU/ml, FSH level <2.5 IU/ml, estradiol <20 pg/mL, normal genital anatomy established by pelvic examination and endovaginal ultrasonography. The exclusion criteria were abnormal serum thyroid stimulating hormone and prolactin levels, hypothalamic-pituitary lesion documented by sella X-ray/magnetic resonance imaging. Independent from the type of COS protocol, a total of 74 women with idiopathic HH were recruited for comparison. To generate control group from each center, for every women with idiopathic HH, we retrieved two age matched (± 1 year) women treated with ICSI due to tubal factor infertility in the same period of time ($n=148$ women). The primary outcome was live birth rate (LBR) defined as the delivery of a live born >24 weeks of gestation.

Results: The mean female age, body mass index and duration of infertility was similar between idiopathic HH group and controls (Table 1). Clinic pregnancy rate per started cycle in HH patients and controls were 46.6% and 31.7%, respectively ($p=0.55$). Of 74 women with HH, whereas GnRH antagonist protocol had been employed in 27 (36.5%), GnRH agonist had been given in 15 (20.3%) of them. Pituitary suppression was not employed in the remaining 32 (43.2%) patients. When compared with patients supplemented any type of GnRH analogue, women without pituitary suppression had significantly higher embryo implantation rate (24.5% vs. 52.1%, $p=0.03$) (Table 2). Although there was a trend in favor of no pituitary suppression subgroup, clinical pregnancy (28.6% vs. 46.9%, $p=0.14$) and LBR (26.2% vs. 40.6%, $p=0.22$) per cycle could not reach statistical significance. For the luteal phase, clinical pregnancy (55.6 vs. 42.7%, $p=0.36$), live birth per

Table 1. Demographic characteristics and ovarian reserve assessment of patients with idiopathic HH and controls

	Patients with HH (n=74)	Control group (n=148)	P value
Female age (years)	30.8±5.0	31.0±4.5	0.77
Body mass index (kg/m ²)	25.0±4.6	25.6±4.4	0.38
Duration of infertility (months)	60.0 (36.0–89.0)	72.0 (36.0–108.0)	0.15
Serum FSH (IU/L)	0.8 (0.2–1.9)	6.5 (5.3–7.9)	<0.001
Serum LH (IU/L)	0.3 (0.1–1.0)	5.1 (3.6–6.3)	<0.001
Serum estradiol (pg/ml)	13.0 (10.0–18.9)	42.5 (29.0–59.0)	<0.001
Antral follicle count	5.0 (2.0–10.0)	11.0 (8.0–15.0)	<0.001

Values are given as mean±SD or median (25th - 75th percentiles)

Table 2. Comparisons between ART cycles using GnRH analogue or not in women with idiopathic HH

	With GnRH analogue (n=42)	Without GnRH analogue (n=32)	P value
Female age (years)	31.0±5.2	30.6±4.6	0.70
Ovarian stimulation length (days)	12.0±2.6	10.3±2.4	0.01
Total FSH dose (IU)	4200.0 (3112.5 - 4812.5)	3337.5 (2662.5 - 4650.0)	<0.001
Peak estradiol pre-trigger (pg/ml)	1939.5 (1061.2 - 2374.2)	1548.0 (1195.0 - 4000.0)	0.17
Number of oocytes retrieved	9.0 (4.0 - 14.0)	12.0 (7.0 - 19.0)	0.07
Number of mature oocytes	7.0 (4.0 - 11.2)	8.0 (6.0 - 12.0)	0.60
Number of 2 PN embryos	5.0 (2.0 - 8.0)	4.0 (3.0 - 6.0)	0.32
Number of patients with embryo transfer	34/42 (81.0)	24/32 (75.0)	0.54
Number of embryos transferred	1.0 (1.0 - 2.0)	1.0 (0.25 - 2.0)	0.50
Rate of day 5 transfer (%)	11/34 (32.4)	11/24 (45.8)	0.30
Implantation rate (%)	24.5	52.1	0.03
Clinical pregnancy per cycle (%)	12/42 (28.6)	15/32 (46.9)	0.14
Live birth per cycle (%)	11/42 (26.2)	13/32 (40.6)	0.22
Miscarriage/clinical pregnancy (%)	1/12 (8.3)	2/15 (13.3)	0.76

Values are given as mean ± SD or (25th - 75th percentiles) unless stated otherwise.

cycle (50.0 vs. 37.5%, p=0.37) and miscarriage rates (9.1 vs. 10.0%, p=0.64) were similar in women who were supported with estrogen and progesterone or progesterone alone.

Conclusion: Rather than supplementing any GnRH analogue, using any type of them might even have detrimental effect on pregnancy. Supporting the luteal phase with estrogen and progesterone together does not further enhance pregnancy rates when compared with progesterone alone. Those results emphasize that stimulation with only gonadotropin without any pituitary suppression and supporting the luteal phase with only progesterone achieve excellent outcome while preventing unnecessary polypharmacy and limiting treatment burden.

Keywords: idiopathic hypo-gonadotrophic hypogonadism, pituitary suppression, GnRH AG/ANTAG, controlled ovarian stimulation, luteal support

[OP-157]

Comparison of urodynamic parameters between intrafascial and extrafascial hysterectomy techniques

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Objective: The aim of this study was to compare urodynamic parameters at preoperative and postoperative periods in patients undergoing intrafascial or extrafascial abdominal hysterectomy with benign gynecologic indications.

Material and Methods: Women scheduled for total abdominal hysterectomy were randomized to intrafascial (n=24) and extrafascial (n=27) at the gynecology department. The groups were controlled for demographic variables, obstetric and gynecological history, indications for hysterectomy and preoperative hemoglobin values. All of the patients under both techniques were given a urodynamic investigation at preoperative and sixth week postoperative periods. Cystometry was performed in the urodynamic investigation at preoperative and postoperative periods. All of the 10 urodynamic parameters investigated in the two techniques at preoperative and postoperative periods were compared. P<0.05 was chosen to represent the statistical significance for each of the variables.

Results: A total of 51 patients enrolled in this study. The mean age of these was 48.49±4.87 years. Extrafascial hysterectomy was performed on 27 out of 51 cases and intrafascial hysterectomy was performed on the remaining 24 cases. The mean body mass index (BMI) was 30.316±5.76 kg/m². When the urodynamic values of pre- and posthys-

terectomy periods were compared between the two techniques, no significant change could be found in maximum detrusor pressure, maximum abdominal pressure, vesical compliance, detrusor compliance, maximum vesical pressure, first sensation, normal desire to void and urge sensation ($p>0.05$). With the intrafascial technique, volume and bladder capacity significantly increased after the operation compared to the extrafascial technique ($p<0.05$). Urodynamic testing performed before the operations revealed that two patients had stress urinary incontinence and one patient had urge incontinence. No patient developed stress or urge incontinence following the operation.

Conclusion: According to the results of this study, no significant correlation could be found between exacerbation or de novo development of stress or urge incontinence and intrafascial or extrafascial postabdominal hysterectomy periods. Regarding the development of urinary incontinence, comparison of the two techniques is only possible when performed on homogenous patient groups (as in our study), but also requires an extended number of cases. In the intrafascial technique, maximum bladder capacity significantly increased following the operation, compared to the extrafascial technique. No significant relationship was found between the two groups with respect to increase of stress or urge urinary incontinence symptoms and de novo incontinence following hysterectomy.

Keywords: Hysterectomy, urodynamic, intrafascial, extrafascial, incontinence

[OP-158]

Bilateral sacrospinous fixation without hysterectomy: 18-month follow-up

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Objective: The goal of surgery of pelvic organ prolapse is to increase the quality of life, restore the anatomy and functional status, and prevent the recurrent prolapse. Apical support is the most important point for successful surgery. Abdominal sacrocolpopexy (ASC) and vaginal sacrospinous fixation (SSF) offer a long-term efficiency of 78%-100% and 73%-97%, respectively, in providing apical support. The advantage of SSF is that it does not require laparotomy and general anesthesia, the procedure is cost-effective, and early discharge is possible.

Material and Methods: In the present study, a total of 22 women with pelvic organ prolapse (POP) of stages 2-4 underwent bilateral SSF with surgical mesh (Prolen®; Ethicon, Norderstedt, Germany) interposition. In the preoperative and postoperative period, all patients were examined according to the pelvic organ prolapse quantification system (POP-Q), and Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire-12 (PISQ-12) forms were completed. A polypropylene suture (Prolen®; Ethicon, Norderstedt, Germany) (no:1) was bilaterally placed on the sacrospinous ligament. The tips of the 5 x 1.5 cm

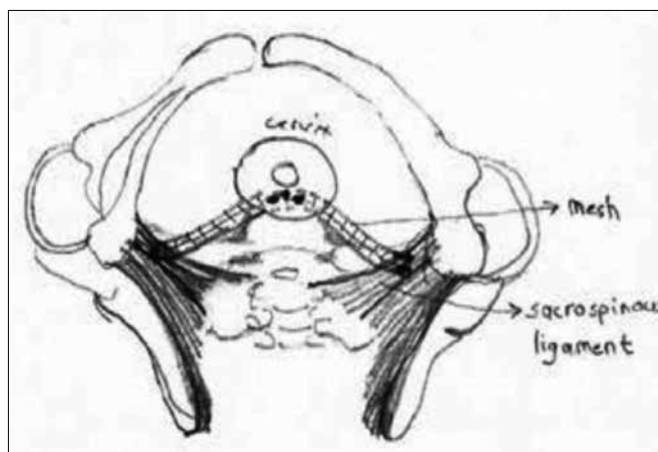


Figure 1.

Table 1. The comparison of the prolapsed points before the operation and at 6, 12, and 18 months postoperatively

n=22	"Preoperative Mean±SD"	"6 Months Mean±SD"	"12 Months Mean±SD"	"18 Months Mean±SD"	p
Aa Point	1.69±0.62	-3.68±0.43	-3.46±0.89	-3.58±0.41	0.001*
Ba Point	1.25±2.23	-3.85±0.41	-3.74±0.59	-3.85±0.39	0.001*
C Point	0.85±3.03	-7.35±0.41	-7.27±0.38	-7.26±0.36	0.001*
D Point	0.07±2.79	-8.20±0.31	-8.16±0.36	-8.13±0.37	0.001*
Ap Point	0.22±1.49	-4.10±1.09	-3.86±0.37	-3.85±0.36	0.001*
Bp Point	0.05±2.34	-4.10±0.37	-4.07±0.34	-4.07±0.33	0.001*
Friedman Test, *p<0.01					

Table 2. The comparison of the cases with respect to PISQ-12 scores in the preoperative period and at 6, 12, and 18 months postoperatively

n=20	Min-Max	Median	Mean ± SD	p
PreoperativeABC	30/43	40.5	39.50±3.41	0.001*
6 MonthsAde	38/46	43.0	43.10±1.94	0.001*
12 MonthsBdf	41/46	43.0	43.55±1.57	0.001*
18 MonthsCef	41/46	43.0	42.95±1.15	0.001*

*Repeated Measures Test where $p<0.01$, Wilcoxon Signed Rank tests were used for the paired comparisons, and capital letters were used where $p<0.01$, p values were A: 0.001, B: 0.001, C: 0.001, d: 0.216, e: 0.748, f: 0.110 PISQ-12: Pelvic organ prolapse/urinary incontinence sexual questionnaire-12; SD: standard deviation

polypropylene mesh (Prolen®; Ethicon, Norderstedt, Germany) were suspended over this suture. The mid-point of the mesh was attached to the mid-section of the posterior surface of the cervix with three stitches using polypropylene no:1 sutures (Prolen®; Ethicon, Norderstedt, Germany) (Figure 1). Wilcoxon Signed Ranks test, Friedman test and Repeated measures test were used for statistical analysis.

Results: The comparison of preoperative and postoperative POP-Q results at 6, 12, and 18 months revealed strong significant differences for points Aa, Ba, C, D, Ap, and Bp ($p=0.001$) (Table 1). According to the POP-Q system, the recovery of the apical point and vaginal wall is remarkable in the postoperative period. The evaluation of the total PISQ-12 scores revealed significant improvement in the symptoms of the patients compared to the preoperative scores ($p=0.001$) (Table 2).

Conclusion: Unilateral SSF is associated with the anatomical distortion of the vagina and the rectum that may alter both sexuality and bow-

el function. Because of these reasons, studies have focused on anatomical and functional results after bilateral SSF. Magnetic resonance studies showed that measurements of the distance between the vaginal apex and bony pelvic landmarks and the ischial spines in women who underwent bilateral SSF were similar to the measurements in nulliparous women with normal support. Hence we thought that bilateral SSF keep the vaginal axis more close to original anatomic position. We did not perform hysterectomy because the uterus itself passively causes prolapsed it is vital to the maintenance of pelvic floor structure and functions. Additionally we believe that more sutures can be placed through more durable tissue in the cervix.

Keywords: Pelvic organ prolapse, surgical mesh, vaginal vault

[OP-159]

Posterior vaginal wall cyst masquerading as rectocele: A diagnostic dilemma

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Introduction: Benign cystic lesions of the vagina are relatively uncommon. Mesonephric (Gartner ' s duct) cysts, Bartholin gland cysts, Mullerian cysts and squamous inclusion cysts are the most type of vaginal cystic lesions respectively (1). This paper illustrates a rare case of large posterior vaginal wall cyst of Mullerian origin mimicking rectocele.

Case: A -35year-old multiparous woman was admitted to our gynecological clinic with a complaint of reducible non-tender mass protruding from the vagina noted for about a year. On pelvic examination, a bulging mass protruded from posterior vaginal wall (Figure 1). The mass was soft and could be compressed manually easily. The mass appeared to be a rectocele and colpography posterior was planned. After dissection of the posterior vaginal wall there was a 5 cm diameter cyst deep to the posterior vaginal wall. Cyst was dissected com-



Figure 1. A bulging mass protruded from posterior vaginal wall mimicking rectocele

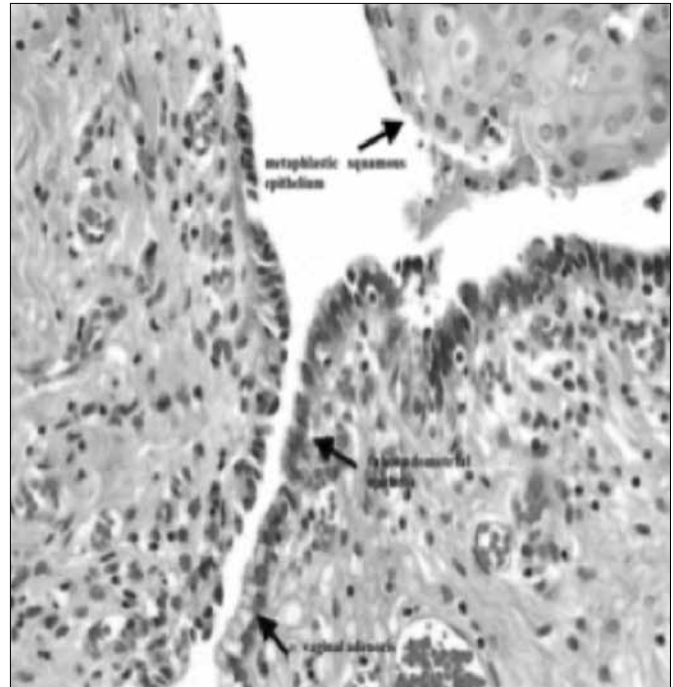


Figure 2. Pathologic finding of cyst

pletely from the vaginal wall. Cysts derived from müllerian epithelium arise from patches of vaginal adenosis and are lined by tuboendometrial- or mucinous-type epithelia and metaplastic squamous epithelium (Figure 2). Follow-up and long-term recovery were uneventful.

Discussion: Mullerian duct cysts are remnants of the embryological paramesonephric ducts (2). Usually they are single and they have been reported to be located typically anterolateral vaginal wall (3,4). Vaginal wall cysts are usually discovered incidentally on physical examination. Our case presented with complaints of something coming out of vagina for a year which was increasing in size but there were no associated urinary or bowel symptoms. There should be remembered in the differential diagnosis of large, protruding vaginal masses.

Keywords: Mullerian cyst, mimicking rectocele, vaginal wall

[OP-160]

Effects of Tans-Obturator Tape outside-in versus inside-out procedure for stres urinary incontinence on women's sexual functions and quality of life: Results of a prospective randomized study

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Objective: This study aimed to assess the effects of Trans-Obturator Tape (TOT) procedure for stress urinary incontinence (SUI) on wom-

en's quality of life, sexual function and psychosocial state. And compared the two techniques of TOT procedure; inside-out and out-side in technique.

Material and Methods: This prospective randomized study included 101 patients who underwent surgery for SUI. The patients with urodynamically proved stress urinary incontinence were divided into two groups randomly: 59 women had outside-in TOT, 42 women had inside-out TOT procedure. Preoperative and postoperative after six months scores on HADS (Hospital Anxiety and Depression Scale), SQoL-F (Sexual Quality of Life-Female), PISQ-12 (Pelvic Organ Prolapse/ Urinary Incontinence Sexual Function) were evaluated between two group.

Results: In all patients the postoperative SQoL-F and PISQ-12 scores were significantly higher than the preoperative scores ($p < 0.001$). Significant improvements were observed in emotional-behavioral, physical, partner relationships, psychosexual feelings, sexual and relationship satisfaction, self-worthlessness and sexual depression. The mean postoperative HADS scores were significantly lower than the mean preoperative HADS scores ($p < 0.001$). Preoperative and postoperative differences at emotional-behavioral and physical scores in PISQ-12 statistically higher increases in inside-out TOT procedure than the outside-in TOT procedure ($p = 0.037$, $p = 0.026$, respectively).

Conclusion: The outside-in TOT procedure and inside-out TOT procedure are both statistically improved the sexual quality of life, sexual functions and psychosocial state. Additionally postoperative emotional-behavioral and physical scores in PISQ-12 were significantly more increase in inside-out TOT group than outside-in TOT group.

Keywords: Incontinence, sexual function, sexual quality of life

[OP-161]

Creation of neovagina in a patient with complete uterovaginal agenesis using peritoneum of bladder, a case from Pristina, Kosovo

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Introduction: Complete vaginal agenesis is a rare congenital condition that occurs in approximately 1 in 4,000–10,000 female births which is frequently associated with Mayer-Rokitansky-Kuster-Hauser syndrome (MRKHS). MRKHS is characterized by vaginal agenesis with variable Mullerian duct abnormalities. Women who suffer from MRKH have no vagina or uterus but normal karyotype (46, XX), ovarian function, external genitalia, and secondary sex characteristics of female gender. Some patients also have other associated malformations, as renal (40%), skeletal (10%–12%), and auditory abnormalities. There is still no consensus regarding the best



Figure 1. Dissection of the peritoneum

management option for Rokitansky syndrome. There are several methods previously used for vaginal construction. Here we aim to present a case of surgical creation of neovagina using peritoneum of posterior bladder during an official volunteer period in Pristina, Kosovo.

Case Report: A 22 years old girl at her admission to the outpatient clinic, was diagnosed with vaginal agenesis. There was complete absence of vagina without introitus as well. Further evaluation revealed also absence of the uterus and ectopic pelvic kidney. After detailed counselling with the patient and her family, vaginoplasty for creation of a neovagina was performed. With a pfannenstiell incision, pelvic organs were explored. There was complete absence of the uterus with two fallopian tubes and ovaries surrounded by a loose peritoneal overlay. Her right kidney was located at the pelvis. Dissection of the peritoneum covering the vesicorectal pouch was performed (Figure 1), and dissection progressed until subcutis in the position of the introitus. Anterior portion of the dissected peritoneum from the posterior of the urinary bladder was used to form a cylindrical shaped neovaginal model of 5 cm in diameter and 10 cm length. After formation of the flap, it was converted in order to provide the smooth peritoneal surface as the inner vaginal wall. A 3-cm horizontal incision was made at the subcutaneous tissue in the position of the introitus. The peritoneal sheet was drawn out through the canal. And the newly formed vaginal introitus was sutured separately with 3/0 vicryl (Figure 2). At the end of the operation the neovagina had at least 8 cm length, and 3-4 cm width. At the immediate inspection, no early signs of ischemia was noted at the flap site.

Discussion: Management of vaginal agenesis in the MRKHS is an important point of interest as the outcome affects physical and psychosocial health of the women. The aim of vaginoplasty should be



Figure 2. Vaginal intraoitus is formed and sutured separately

the creation without excessive morbidity of a neovagina that will be satisfying in appearance, function and feeling. Peritoneum has been considered as an appropriate material to provide a suitable vaginal environment. Also this procedure is easily applicable, the early results are encouraging and has lesser potential of complications regarding bowel injury and cutaneous tissue recovery at the other procedures. In conclusion creation of neovagina using peritoneal flap is a promising and choic, however the main point of consideration is to be tailored to the individual's needs, the motivation of the patient and the experience of the surgeon.

Keywords: Vaginal agenesis, mullerian, neovagina, peritoneum

[OP-162]

The impact of concurrent pelvic organ prolapse reconstructive surgery on midurethral sling procedure outcome

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Objective: To evaluate the impact of concurrent pelvic organ prolapse (POP) reconstructive surgery on midurethral sling procedure outcome

Material and Methods: This retrospective study included 300 women who had stress urinary incontinence diagnosed by urodynamically and underwent midurethral sling procedures with or without concurrent POP reconstructive surgery at Zekai Tahir Burak Woman's Health Education and Research Hospital between May 2012 and February 2015. Patients were divided into four groups due to conducted surgery as: only Transobturator tape (TOT), TOT + POP, only Tension free vaginal tape (TVT) and TVT + POP. Preoperatively, all women were asked to complete Incontinence Impact Questionnaire-7 (IIQ-7) and Urogenital Distress Inventory (UDI-6) questionnaires in order to assess quality of life. Outcomes of surgeries for each group were

Table 1. Comparisons of groups

	Only TOT (n=42)	TOT+ POP (n=70)	P1 Value	Only TVT (n=49)	TVT+ POP (n=139)	P2 Value	P3 Value	P4 Value
IIQ7 (Preoperative)	15±4.9	14±4.7	0.9	15.8±3.9	14.9±4.7	0.2	0.3	0.9
IDU6 (Preoperative)	13±3	13±3.9	0.2	12.4±4.3	12.8±3.4	0.4	0.07	0.6
IIQ7 (at the end of the 1 st month)	3.9±3.1	3.1±2.2	0.1	2.9±2.6	2.8±2.7	0.8	0.1	0.5
IDU6 (at the end of the 1 st month)	3.4±2.8	2.5±1.7	0.04	2.6±2.1	2.9±2.5	0.4	0.1	0.3
Cure Rates	90.5	76	0.04	92	88	0.6	0.5	0.02

Datas are shown as mean ± standard deviation. Cure rates are shown as percent. P values was calculated by Independent sample t-test and Pearson's chi square test. P1: Probability value between Only TOT and TOT+POP groups. P2: Probability value between Only TVT and TVT+POP groups. P3: Probability value between Only TOT and Only TVT groups. P4: Probability value between TOT+POP and TVT+POP groups. P<0.005 was considered statically significant.

Table 2. Linear regression analysis of variables that might be affective on midurethral sling procedure outcome

Variables	Sayı (n/n)	Wald	Exp (B)	P	95% CI for Exp (B)
Age (60</>60)	61/239	0.2	1.2	0.6	0.4-3.3
TOT / TVT	112/188	2.9	1.8	0.08	0.9-3.7
POP (+/-)	209/91	3.0	0.4	0.08	0.2-1.1
Body Mass Index (30</>30)	148/152	0.1	0.8	0.6	0.4-1.6
Parity (n)	--	0.11	1.1	0.7	0.4-3.1
Menopausal Status (+/-)	132/168	0.5	0.7	0.4	0.3-1.6
Smoking (+/-)	49/251	0.3	1.3	0.5	0.5-3.8
Macrosomic Birth (+/-)	50/250	0.05	1.1	0.8	0.4-2.9
MUCP (40</>40)	271/29	0.5	0.6	0.4	0.2-1.9
VLPP (90</>90)	104/196	0.8	0.8	0.5	0.3-1.6

Calculated by Binary logistic regression model p<0.005 was considered statically significant.

evaluated by performing cough stress test postoperatively at the end of first month and also IIQ-7 and UDI-6 questionnaires were repeated. Presence of negative cough stress test was defined as "Cure" while positive test result was defined as "Failure". Intraoperative and postoperative complications were also noted.

Results: In Only TOT group, there were 42 women while in TOT+POP group, 70 women. On the other hand, only TVT procedure were performed for 49 women while 139 women had TVT with POP reconstruction. There were no significant differences in terms of demographics, preoperative IIQ-7, UDI-6 scores and urodynamic parameters between the groups. Postoperative UDI-6 score and postoperative cure rate were significantly higher in only TOT group as compared in TOT+POP group (Table 1). However in multiple regression analysis, woman age, parity, body mass index, menopausal status, preoperative urodynamic parameters midurethral sling types and presence of any concomitant POP reconstructive surgery were found ineffective on surgical outcomes (Table 2). No statistical significance was found between the groups in terms of complication rates, else.

Conclusion: The concurrent POP reconstructive surgery does not affect midurethral sling procedures outcomes. However, further prospective studies with more participants are needed.

Keywords: Midurethral sling, pelvic organ prolapse, outcome

[OP-163]

Delayed vaginal and cesarean delivery in a twin birth: a case report

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Introduction: Preterm labor is the delivery that occurs between the 20th and 37th weeks of pregnancy. It occurs more in multiple pregnancies than in singleton pregnancies. In twin pregnancies, vaginal birth can be realized during the preterm labor process. We present here a case where a woman pregnant to twin babies applied to our clinic with the complaint that her labor pains started at gestational week 28 and after her first fetus was delivered by vaginal means, her second fetus was delivered through cesarean section after a follow-up period of 18 hours.

Case Report: A 27-year-old G1P0 woman pregnant for 28 weeks and 3 days presented to our clinic complaining about the onset of her labor pains. In her obstetric ultrasound examination, dichorionic and diamniotic twin fetuses were seen that were compatible with their gestational weeks and were weighing approximately 1,250 and 1,260 g. The babies were in a vertex-vertex presentation. Her vaginal examination showed 80% effacement and 7 cm dilatation. The patient was spontaneously monitored in the delivery room. An hour after the observational period, the first fetus was delivered weighing 1,260 g, with an APGAR of 8/10. The placenta of the first fetus was left inside. The cervix was observed to close after the birth of the first fetus. The cervix was measured as 33 mm in the transvaginal ultrasound examination. A decision was made to wait for the birth of the second fetus and the family was informed accordingly. A Cellestone Chronodose (Betamethasone acetate) 1 IM ampoule was administered for pulmonary maturation. After the patient was monitored for approximately 18 hours, the other delivery was realized through cesarean section. A baby girl was delivered weighing 1,280

g, with an APGAR of 8/10. A phase 1 subependymal germinal matrix bleeding developed in the first baby, but the bleeding site was seen to recover in its further follow-up without leaving any sequela. No complications developed in the second fetus. The patient was discharged at day 2 after the operation.

Conclusion: Preterm labor occurs in 5-15% of all births and is responsible for most of the neonatal morbidity and mortality. The most important modality in managing preterm labor is to gain time until the pulmonary maturation of the fetus. Preterm labor is seen more often in multiple pregnancies. The treatment approach is decided on considering the maternal and fetal status in cases of preterm labor in multiple pregnancies. Waiting is possible for the pulmonary maturation of the second fetus following the vaginal birth of the first fetus unless immediate action is inevitable. The placenta of the first fetus should not be removed as the removal of placenta may trigger birth labor for the second fetus. Corticosteroids should be administered during such waiting. In any case, the patient should be closely monitored for early and late postpartum complications such as chorioamnionitis, vaginal bleeding and uterine atonia, and by well management of these risks, a cesarean delivery should be effected without waiting for the labor.

Keywords: Delayed interval delivery, twin pregnancy

[OP-165]

A rare cause of adnexal mass: Chondrosarcoma

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Introduction: Although metastases are rarely seen in the female genital system, ovary involvements are common in the presence of pelvic metastasis. Uterine tumoral involvements occur usually when the neighboring organ tumors spread or more often in advanced stage ovarian tumors, but distant organ metastases can also be seen rarely. Metastasis to the uterus is mostly reported in breast, stomach and colon cancers. For this reason, a multidisciplinary approach is necessary in the diagnosis and treatment of a pelvic mass. Chondrosarcoma is a malign tumor developing from hyaline cartilage matrixes and chondrocytes and involving mostly the proximal femur and proximal humerus. We share here our experience with a patient who had been referred to us from an external clinic with a pelvic mass complaint and whom we diagnosed with metastatic myxoid chondrosarcoma of extragenital origin.

Case Report: A 61-year-old female patient with whom we had linguistic cooperation difficulty presented to the hospital with an abdominal pain localized at the bilateral lower quadrant. Her anamnesis involved an operation with an unspecified diagnosis she had undergone twice in 2008 and 2011 on her front thoracic wall. Her gynecological examination and transvaginal ultrasound revealed a mass approximately 76x62 mm in size with a heterogeneous appearance that was localized behind her uterus and displaced it. CA-15-3: 57.2 U/ml and CA-125: 313.4 U/ml were found in the biochemical analysis. In her Positron Emission Tomography (PET), a cystic mass with a high potential of primary malignancy was seen in the posterior of her uterus, lymph nodes with a high potential of metastasis in her pararectal and

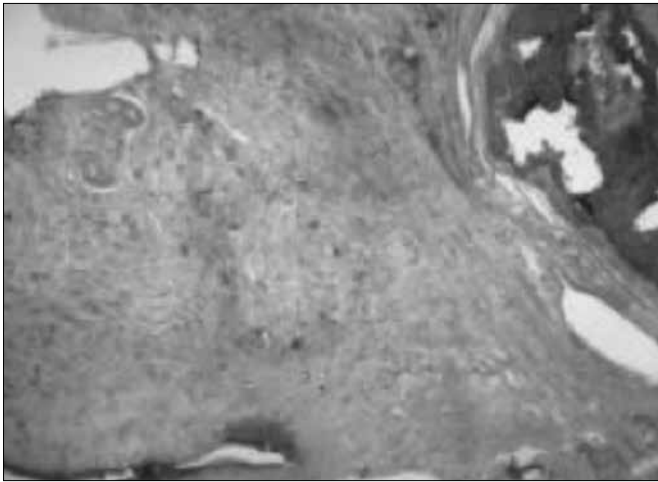


Figure 1. Revealed chondromatous tumor infiltrating uterine cervix wall. Infiltrating tumor at the upper right and squamous epithelium of cervix at the bottom were seen. 20× H&E

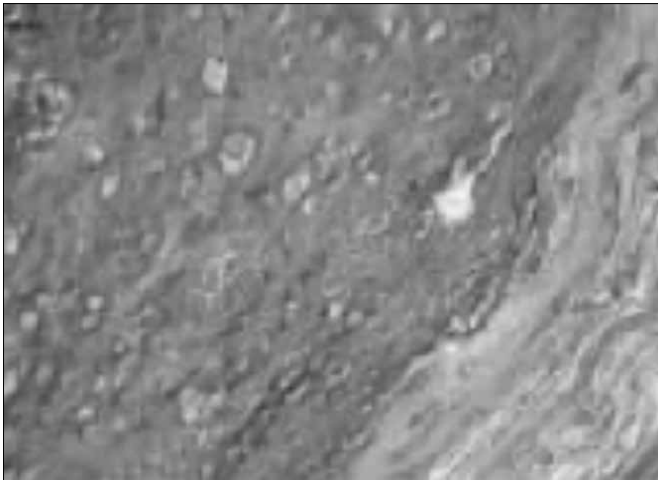


Figure 2. The tumor cells with eosinophilic nuclei were embedded in a basophilic chondromatous stroma (arrows) 200× H&E. At higher magnification it was seen that the tumor was composed of atypical cells, with eosinophilic nuclei embedded in a chondromatous stroma (arrows)

paracolic regions, and sites showing increased metabolic activity in the soft tissue neighboring her right atrium. These findings suggested general malignancy and resulting metastases. Our exploration for any cardiac metastasis using Cardiac Magnetic Resonance exhibited a complicated cystic lesion 4×6×8 cm in size with lobule contours, which was localized at the right cardiophrenic angle and contained multiple internal septations, and this was found significant with respect to metastasis. The patient was administered exploratory laparotomy. During exploration, a mass around 10 cm in size was seen neighboring the posterior wall of the uterus. Although the frozen section assessment of the mass confirmed presence of malignancy, it did not show at first sight any signs suggesting ovarian pathology. The patient was administered pararectal tumoral mass excision, total abdominal hysterectomy, bilateral salpingo-oophorectomy, total omentectomy, right subhepatic tumoral implant excision and appendectomy. After normal follow-up, the pathology was assessed as myxoid chondrosarcoma. The omentum, paracolic areas and cervix were found to be infiltrated by the tumor and chemotherapy was planned for the patient after examining her for any cardiac metastasis.

Conclusion: Intervention to a pelvic mass is a difficult process that

concerns many departments including gynecology, general surgery, and urology. When making an initial diagnosis, primary gynecologic, urologic, and GIS-related malignancy as well as any metastasis associated with such malignancy should be considered. Additionally, an intra-operative frozen section examination should always be carried out.

Keywords: Chondrosarcoma, adnexal mass

[OP-166]

A case report: Genital tuberculosis mimicking ovarian cancer

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Introduction: Genital tuberculosis is caused by the hematogenous spread of mycobacterium tuberculosis from primarily infected sides other than internal genitalia. The tubes were the most infested areas in the internal genitalia. The development of granulomas on the walls of the affected tubes and formation of adhesions between the adjacent organs were expected intra-abdominal findings of genital tuberculosis. It is a clinical entity, generally seen in young women aged between 15-25 years. Here we present our experience and a case of genital tuberculosis mimicking ovarian cancer with its clinical findings in an elderly patient.

Case Report: A 64-year-old patient was admitted to the hospital with complaint of abdominal pain localized in bilateral lower quadrants. Ultrasonographic assessment of the patient revealed a right ovarian cyst in 3×3 cm diameters concomitant with a widespread acid in the abdomen. Biochemical assessment showed increased tumor markers (CA- 15-3: 57.2 /ml and C -125: 313.4 U/mL) and positron emission tomography (PET) represented increased fludeoxyglucose (FDG) uptakes in line with the diagnosis of primary malignancy and metastasis [Increased FDG uptake in the diffuse thickened peritoneal areas (SUV max:11.1) and in the right adnexal soft peritoneal tissue area (SUV max:9.8)]. During the diagnostic laparoscopy, diffuse adhesions have been identified and frozen section of the bilateral ovarian biopsies had revealed the presence of benign pathology rather than expected malignancy. The adhesion formation seen in the abdominal cavity thought to cause due to infection. The biopsies taken from fallopian tubes, ovaries and peritoneum all revealed caseified granulomatous inflammation together with salpingitis and peritonitis due to tuberculosis. The cytological assessment of the abdominal free fluid showed lymphocytes and mesothelial cells. Mycobacterium tuberculosis complex was proliferated from the obtained urine culture as final proof of genital tuberculosis. A classical four agent anti-tuberculosis treatment was initiated thereafter.

Conclusion: Tuberculosis salpingitis is a clinical entity, most commonly seen in young women between 15-25 years old and often causing abdominal pain and infertility. It is rarely seen in the elderly. The increased tumor markers and FDG uptakes in PET, in an elderly patient were all in line with the possible diagnosis of malignancy or metastasis. And also, it must be kept in mind a considerable amount of patients with genital tuberculosis was diagnosed during the accidental

operations performed due to diagnosis of adnexial tumor or acute appendicitis. Therefore, especially in developing countries due to high incidence of tuberculosis, patients must be evaluated considering the possibility of urogenital tuberculosis.

Keywords: Genital tuberculosis, ovarian cancer

[OP-167]

Joubert syndrome: Case series

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Joubert syndrome (JS) and related disorders (JSRD) are a group of multiple congenital anomalies syndromes in which the diagnostic hallmark is the molar tooth sign (MTS), a complex midbrain malformation visible on brain imaging. Detection of the MTS should be followed by a diagnostic protocol to assess multiorgan involvement. The incidence of JSRD range between 1/80,000 and 1/ 100,000 live births, although these values may represent an underestimate. The neurological components of JSRD include hypotonia, ataxia, intellectual disability, abnormal eye movements, and neonatal breathing problems. These may be associated with multiorgan involvement, mainly retinal dystrophy, nephronophthisis, hepatic fibrosis and polydactyly. With the exception of rare X-linked recessive cases, JSRD follow autosomal recessive inheritance and are genetically heterogeneous. Ten causative genes have been identified to date, all encoding for proteins of the primary cilium, making JSRD part of an group of diseases called "ciliopathies". Analysis of causative genes is available in few laboratories worldwide on a research ba-



Figure 2. Agenesis of cerebellum

sis. Differential diagnosis must consider in particular the other ciliopathies, distinct cerebellar and brainstem congenital defects and disorders with cerebro-oculo-renal manifestations. Recurrence risk is 25% in most families, although X-linked inheritance should also be considered. Optimal management requires a multidisciplinary approach, with particular attention to respiratory problems in neonates. After the first months of life, prognosis varies among JSRD subgroups, depending on the extent and severity of organ involvement.

Keywords: Joubert Syndrome, molar tooth sign, pregnancy

[OP-168]

A rare cause of urinary retention in women: Fowler's syndrome

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Figure 1. Intracranial sonographic findings of Joubert Syndrome (MTS: Molar tooth sign, 4th: Fourth ventricle, SM: Sisterna Magna) Arrow indicates the Open Fourth Ventricle

Introduction: Chronic urinary retention (CUR) is a condition with non-painful bladder and chronic high post-void residual urine (1). Fowler's syndrome (FS) is type of CUR seen in young women and it was described as a unable to void in the absence of any demonstrable cause(2). Many of these women usually have a trigger such as urinary tract infection, general anesthesia, childbirth or gynecologic surgery (3). In this paper we described a patients with PCOS had become FS after transobturator tape procedure (TOT).

Case Report: A -35 year-old multiparous woman was admitted to our gynecological clinic with a complaint of stres urinary incontinance (SUI). She had a history of ovarian cystectomy five years ago. Specific evaluations of SUI such as the pad test for urine leakage, Q-tip test, and pelvic examination for pelvic organ prolapse were performed preoperatively. Preoperative urodynamic studies were performed included uroflowmetry and measurement of postvoid residual (PVR), cystometrogram, pressure-flow study and measurement of urethral closure pressure and leak point pressure. The TOT operation was performed with the patients under general anesthesia. At the end of the operation, a 16-Fr Foley catheter was indwelled and was removed the next day. After removal of urethral catheter PVR measured about 1500 ml. Foley catheter

was indwelled again. Cystourethroscopy was performed for evaluation of suspected operative urinary tract injury (eg, ureteral injury, cystotomy, intravesical placement or erosion of mesh or suture). There were no pathology both in urethra and bladder. Urodynamic studies were performed again. There were post-operative urodynamic findings include reduced bladder sensation, large capacity bladder and detrusor under-activity. Clean intermittent catheterization (CIC) was recommended. After 8 week her urethral output increased gradually to achieve bladder residual urine of <100–150 ml, after which the CIC was stopped.

Discussion: FS first described by Professor Clare J in young women with painless urinary retention in 1985 (4). The classical presentation is woman aged between 20–30 with an intermittent inability to void. This may happen spontaneously or may be after urinary tract infection, general anesthesia, childbirth or a gynecologic operative procedure (5,6). The aim of treatment is to try to ensure bladder emptying. In patients with low residual volume, no further intervention is necessary. Early investigation of chronic urinary retention, correct diagnosis and appropriate treatment in this small group of women can result in better health and improvement in their quality of life.

Keywords: Clean intermittent catheterization, painless urinary retention, residual urine

[OP-169]

A uterine carcinosarcoma case with high levels of AFP (alpha fetoprotein)

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Introduction: To share a rare uterin carcinosarcoma in the literature which presented high levels of alfa fetoprotein

Case Report: A 65-year old postmenopausal patient who complains about abnormal uterine bleeding applied to our clinic. Her serum AFP level was 3360 ng/ml. The pathology result of endometrial biopsy was carcinosarcoma and she subjected to total abdominal hysterectomy + bilateral salpingoophorectomy and bilateral pelvic and paraaortic lymph node dissection. There was no complications neither perioperative nor postoperative. And the patient discharged from hospital at the fourth day of the surgery.

Results: Uterine carcinosarcoma is a rare neoplasm which is have a poor prognosis. There are very few uterin carcinosarcoma cases which presents with high levels of AFP in the literature. There was 10*7*5,5 cm tumor in the uterine cavity which comprise 40% carcinoma, 40% sarcoma and 20% yolc sac tumor in our case. There was no myometrial invasion, lymphovascular space invasion or cervical stromal involvement. Both adnexas was normal. There was no uterine carcinosarcomas which presents with high levels of AFP and which has a yolc sac component, in the literature. There are uterin carcinomasarcomas with hepatic component in the literature. The treatment protocol of uterine carcinosarcoma is surgery and adjuvant chemotherapy. AFP levels can be used on follow-up. Our case had carboplatin-paclitaxel regimen after the surgery.



Figure 1. Yolk sac tumor cells showing positivity for AFP

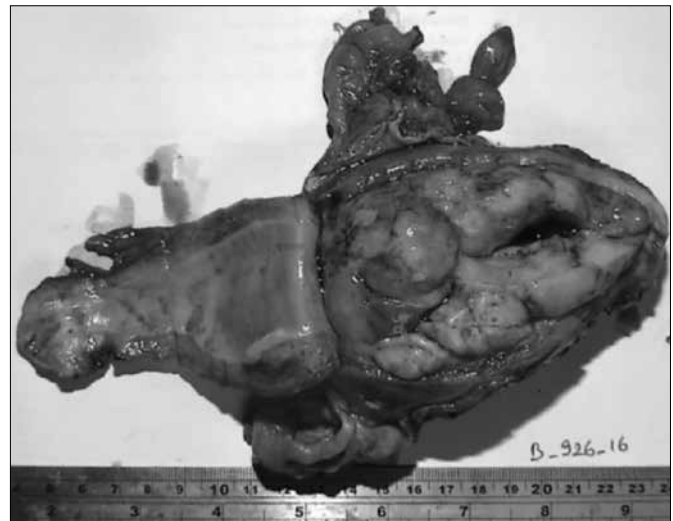


Figure 2. Macroscopic view of the audience

Conclusion: Uterine carcinosarcoma with high levels of AFP is a rare entity. It should not forgotten that yolc sac carcinoma could be accompanied in the histopathological result.

Keywords: AFP (alpha fetoprotein), Carcinosarcoma

[OP-170]

An extremely rare case of complicated appendicitis, in utero appendix with fistula formation

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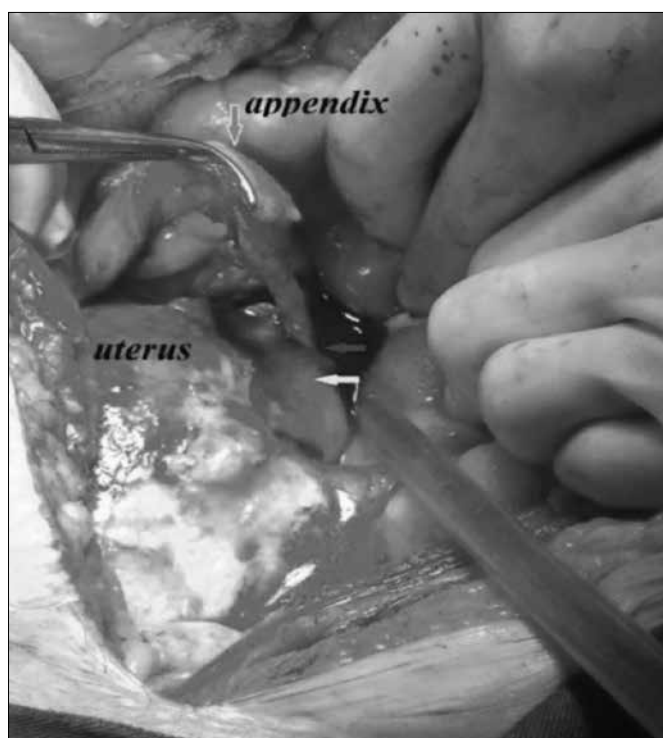


Figure 1. The appendix formed an S-shaped configuration was noted to be enlarged, inflamed, and adherent to uterine surface in its longitudinal plane. The adhesion area on the surface of uterine wall was shown with yellow arrow. The distal part of appendix was embedded deeply into uterus (blue arrow)

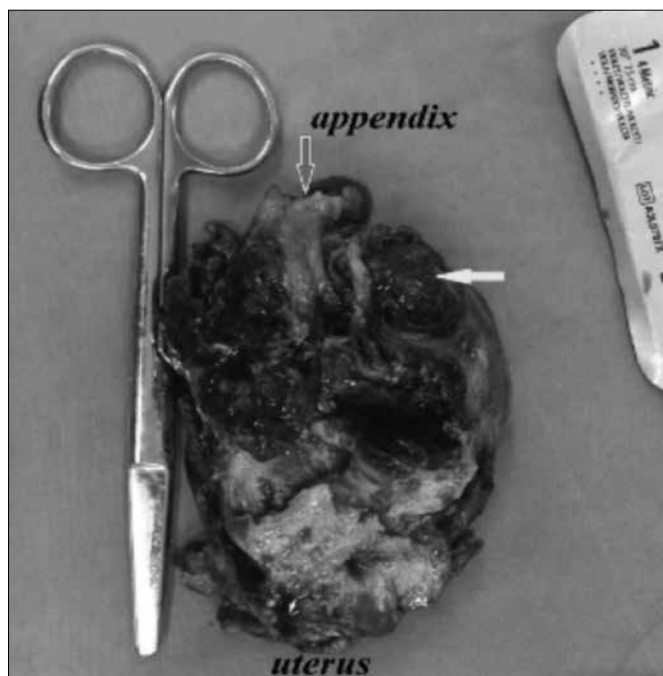


Figure 2. Cut open specimen showed an inflamed appendix invading the myometrium with suppuration and fistula formation. Resected specimen revealed a wide, black area of indurated necrotic tissue (yellow arrow) and inflammatory process involving the entire uterine wall. To preventing the spread of infection, appendix was surrounded by uterine tissue, like a protective barrier

Utero-appendiceal fistula is an extremely rare condition and this is the second case reported thus far. Here we report a case of a 43-year-old female with a presentation of an unusual abscess originating from perforated appendicitis and a fistula between the appendix and uterus. The abscess was surrounded by uterine tissue like a protective barrier so that it becomes a chronic nidus of infection. Although it is important in limiting the spread of infection, the efficacy of antibiotic treatment is probably limited by the same defense mechanisms. Hysterectomy may be the treatment of choice due to destructive effect of inflammatory reactions. This rare condition may be considered in the differential diagnosis of a female patient when presenting with symptoms of pelvic inflammatory disease.

Keywords: Abscess, appendicitis, complicated appendicitis, pelvic inflammatory disease, utero-appendiceal fistula

[OP-171]

Subamniotic hematoma: a rare reported condition

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Introduction: Subamniotic hematomas are classical placental pathological lesions resulting from the rupture of chorionic vessels near the cord insertion. The development of these lesions has been rarely reported in utero. We report on one case of subamniotic hematoma diagnosed prenatally and outline its sonographic and pathological characteristics.

Case Report: The patient was 33 years old gravida 3, para 2. At 16 weeks of gestation a triple test was performed: the calculated risk for Down syndrome was 1/10000. The maternal serum alpha-fetoprotein (MSAPF) was 73,6 IU/ml (2,60 MoM). Because of minimal high MSAPF levels fetal abnormality ultrasound is performed at 20 weeks of pregnancy and left renal pelvicaliectazi (9,5 mm) was found. Placental ve fetal no other abnormality seemed. At 35 weeks of gestation she came for a routine third trimester ultrasound. Grade 3 hydronephrosis seemed in fetal left kidney and on the antero-fundal side of the amniotic sac a peduncular hypoechoic mass of 8x7x4.5 cm surrounded by a thin membrane was visualised (Figure 1). The mass was attached to the uterine wall and was not connected to the fetus, the umbilical cord or the placenta. Color Doppler did not demonstrate flow in the wall or in the lumen. After one day of the routine examination she admitted to the emergency unit with abdominal pain and decrease of fetal movement. She undergo emergency cesarean section with indication of fetal distress. At the operation 50% abruption of placenta seemed and a male baby was born with 2 first minute Apgar score. On examination of the placenta a 15x12x4 cm oval-shaped mass was seen, wrapped in the membranes (Figure 2). The mass was not attached to the placenta or umbilical cord. Microscopical examination revealed thrombotic material, compatible with a hematoma.

Discussion: The occurrence of a subamniotic hematoma is relatively rare. It is defined as a hemorrhage between the amniotic membrane and the fetal chorionic plate, following a tear in one of the branches of an umbilical vessel. Most cases are reported at the time of delivery,



Figure 1.



Figure 2.

and are thought to be caused by traction on the umbilical cord. In the rarer cases of in utero hemorrhage earlier in pregnancy, clot formation and organization occur. The clot is covered by the thin amniotic membrane, and may appear pedunculated into the intra-amniotic cavity. There are several reports in the literature concerning subchorionic hematomas and their association with vaginal bleeding, raised α -fetoprotein levels and poor outcomes such as miscarriage, stillbirth and preterm labor. Although some authors report subchorionic hemorrhages to be a benign finding, others have found their presence to increase the risk of a poor outcome, especially if the hematoma is large. Deans and Jauniaux report high MSAFP at 15–18 weeks and our case had MSAFP of 2,60 MoM at 16 weeks of gestation. The rise in MSAFP may be caused by extravasation of fetal blood into the maternal circulation. The clinical implications of a subamniotic hematoma are uncertain. Intrauterine growth retardation has been reported in 2 cases diagnosed at 18 and 24 weeks, respectively. Our case, diagnosed in the third trimester, had an abruption of placenta outcome.

Keywords: Subamniotic hematoma

[OP-172]

Squamo-transitional cervical cancer: A case report with unusual clinical findings

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Papillary squamo-transitional carcinoma of the uterine cervix (PST-CC) is a rare neoplasm as subtype of the rare transitional cervical carcinoma, which seems to be a variation of squamous cervical carcinoma. PSTCC can be stated as in situ tumor either with or without invasive part but usually both components existing. Furthermore it is difficult to distinguish PSTCC from other papillary lesions of the cervix. There is a predisposition for metastases at an advanced tumor stage and local recurrence referring to this tumor. We present the case report of an 81 years old patient with squamo-transitional cervical cancer with unusual clinical behavior, which was primarily thought to be an ovarian cancer. She had no vaginal bleeding with normal cervix in the clinical examination and the radiologic imaging; nevertheless, the tumor was already metastasized both at retroperitoneal tissue and the right ovary. Radical debulking surgery was performed.

Keywords: Papillary squamo-transitional carcinoma, unusual metastasis, rare cervix neoplasm

[OP-173]

Polyhydramnios and pregnancy complicated with Bartter's Syndrome: A case report

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Introduction: Bartter syndrome is a renal tubular defect that can be diagnosed prenatally, reports are limited on the prenatal course of pregnancies complicated with the disease in the current literature. In this case review we would like to define and debate on the course of pregnancy complicated with Bartter's syndrome in regard with current literature.

Case Report: A 22-year-old patient (G2P1A0) with 24 weeks of pregnancy who had her previous pregnancy diagnosed with Bartter syndrome was referred to our clinic. According to the history taken from the patient, her other child is currently 4 years old and in good health under regular observation by pediatrics and also the patient revealed that she and her husband are related on 1st degree. When asked about her current pregnancy, patient reveals that a detailed fetal ultrasonographic scan was taken at 20th week showing no significant anomalies other than polyhydramnios with amniotic fluid index more than 32 cm in total with the deepest pool being 15 cm. The fetus was delivered with cesarean section. A male infant with APGAR scores of 3 at 1st min and 8 at 5th min with a birth weight of 2030 g (10-50 percentile) was delivered. Neonatal course was complicated with hyponatraemia and polyuria. The diagnosis of Bartter Syndrome was confirmed by laboratory findings afterwards. The child is currently doing well.

Discussion: Case reports of pregnancy complicated with Bartter syndrome are rare. This syndrome was primary described in 1962. Onset may be infancy, childhood, in the neonatal period polyhydramnios occurs in 1–2.8% of all pregnancies and in some cases the aetiology is not identified. Unexplained severe polyhydramnios is a challenge for obstetricians.

In conclusion, we would like to say that Bartter syndrome should be considered in severe idiopathic polyhydramnios cases where no other obvious cause is present.

Keywords: Bartter's syndrome, polyhydramnios, pregnancy

[OP-174]

Intragestational methotrexate treatment cesarean of scar ectopic pregnancy, a case report

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Introduction: Caesarean scar pregnancy is a pregnancy that implants within a caesarean fibrous tissue scar. It is a rare form of ectopic pregnancy with a substantially increasing incidence. There is not a consensus on the method that is preferred for the treatment of scar pregnancy. Such cases are usually referred to advanced center for further evaluation and treatment. Our aim is to present a case that successfully treated with a single dose of methotrexate.

Case Report: 28-year-old woman, gravida 3 parite 2 and before she has two times cesarean delivery. Patient has admitted to examination center with the suspicion of pregnancy. Cesarean incision scar pregnancy has determined and referred to our hospital. She was pregnant 6 weeks 2 days according to crown-rump length measurement and the fetus had heart beat. Both transvaginal and abdominal ultrasound revealed a viable singleton gestation that appeared fixed within the myometrium, anterior to the cervix (Figure 1). No intrauterine pregnancy was identified. Patient was diagnosed as cesarean scar ectopic pregnancy. There were no free fluids in the douglas pouch. Routine tests performed on the patient's blood count and blood chemistry values were found to be normal. Patient were informed about the situation of the pregnancy. If left untreated, the risk of rupture and possible management options, including laparoscopy, suction evacuation, and medical therapy were explained to the patient. The decision was made to implement local methotrexate.

With oocyte pick up needle under transvaginal ultrasonography, we have applied 50 mg local methotrexate. During and after the procedure was no complication. The patient was discharged the next day. Until the β -hCG (β -subunit of human chorionic gonadotrophin) levels normal, patient has called to controls weeks by weeks.



Figure 1. Transvaginal ultrasonographic appearance of Cesarean scar ectopic pregnancy

Conclusion: Initial treatment of scar pregnancy by subtracting scar tissue was at 1978. In the literature, many treatment modalities despite the cesarean scar pregnancy is not yet a full consensus on the most appropriate treatment approach. In our case, we have the local methotrexate treatment transvaginal to gestational sac. After one month, β -hCG levels was normal. As a result, intra gestational transvaginal methotrexate treatment has a short duration, safe and has no major complications and is a treatment method that allows us to avoid surgical procedures. However, further studies needed for the effective treatment modalities.

Keywords: Cesarean scar ectopic pregnancy, methotrexate

[OP-175]

Hyperandrogenism of ovarian origin in postmenopausal woman: Is surgery reasonable for diagnosis and treatment?

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Objective: Hyperandrogenism of ovarian origin is a condition of excessive androgen secretion from the ovary that manifests with signs of virilism (1). Diagnosis of ovarian causes of hyperandrogenism in postmenopausal woman may be difficult. We present a case of postmenopausal hyperandrogenism caused by ovarian stromal hyperplasia and right ovarian luteoma. Total abdominal hysterectomy and bilateral salpingo-oophorectomy was performed for both the diagnosis and the treatment. In this report, we sought if the surgery is reasonable for diagnosis and treatment of hyperandrogenism of ovarian origin in postmenopausal woman.

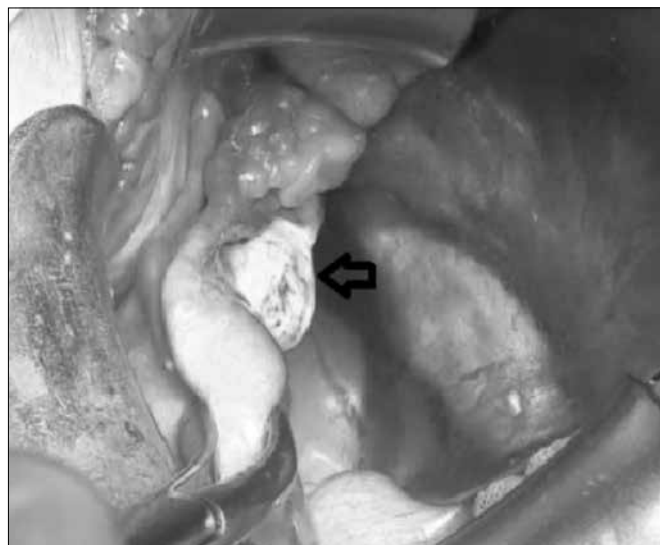


Figure 1. Voluminous right ovary

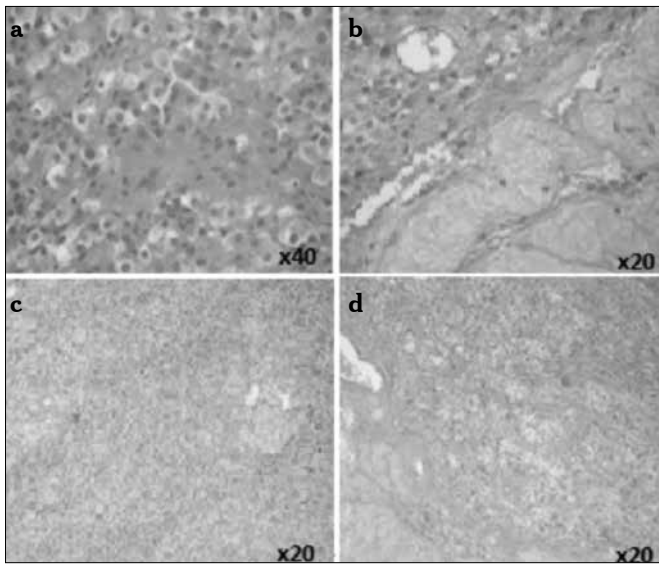


Figure 2. a-d. Luteinised cell proliferation (a, b, d) and stromal hyperplasia (c), Right ovary, HE

Case Report: A 78-year-old woman presented with hirsutism, male pattern baldness and deepening voice had progressed within 2-3 years. She had had regular menstrual periods until menopause at age of 51. Her past medical history revealed non-insulin dependent diabetes mellitus and hypertension had diagnosed 15 and 20 years ago, respectively. General examination was unremarkable except the evidences of virilism. Male pattern hirsutism was predominant on the face and around the umbilicus. Hair loss of forehead and temporal areas had caused alopecia. Ovaries were found palpable in gynecologic examination and larger for her age in transvaginal sonography. Clitoral enlargement was not detected. There were no evidence of adrenal or ovarian tumor with magnetic resonance imaging. In spite of normal serum levels of dehydroepiandrosterone sulfate, androstenedione and 17 hydroxyprogesterone; increased total testosterone level was remarkable. Hyperandrogenism of ovarian origin was suspected; therefore, total abdominal hysterectomy and bilateral salpingo-oophorectomy were performed (Figure 1). Pathologic evaluation revealed bilateral ovarian stromal hyperplasia and ovarian luteoma on the right side (Figure 2). Three months later, normal serum total testosterone level and symptomatic improvement were obtained.

Conclusion: Malignant and benign androgen secreting ovarian tumors, ovarian stromal hyperplasia or hyperthecosis and polycystic ovary syndrome were reported as causes of hyperandrogenism of ovarian origin in postmenopausal woman (1,2). Current diagnostic tools and methods have usually been failed for definitive diagnosis of these conditions (3). Even though malignant tumors are supposed to be detected with imaging and evidences of cancer, only pathologic evaluation provides the diagnosis of benign tumors which are mostly in very small size and non-tumoral benign pathologic conditions of ovarian stroma (4). Therefore, surgery is reasonable for definitive diagnosis and appropriate treatment in postmenopausal woman whose fertility does not matter.

Keywords: Luteoma, ovarian stromal hyperplasia, postmenopausal hyperandrogenism

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[OP-176]

Unilateral renal ectopic kidney during paraaortic lymphadenectomy: A case report

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Kidney, which has a place outside of renal fossa, is called renal ectopia. In a normal position, the kidneys are located retroperitoneal in the lumbar region. The upper pole of the left kidney is placed at the level of the T11 vertebra, whereas the upper pole of the right kidney lies at a lower level, at the level of the T11-T12 intercostal space. The variations in the number, shape, size, position, rotation and the vascularization of the kidneys are of immense importance due to their susceptibilities. An ectopic kidney might be found in the pelvis, abdomen, and thorax. A 51-year-old female, presented with abnormal vaginal bleeding and pelvic pain with a two-week history was referred to the gynecology department. In the pelvic examination, a 4-cm exophytic, cancerous lesion was found in the uterine cervix that extended into the cervical canal. Vaginal fornix and parametrium were not involved. We performed a punch biopsy of the cervix, and it was reported as adenocarcinoma of cervix. For staging work-ups, complete blood counts, blood chemistry, chest X-ray were performed. 18F-fluorodeoxyglucose (FDG) positron emission tomography (PET/CT) was also performed. It demonstrated significant uptake in the mass 8 centimeters to 6 centimeters on cervix. There is no evidence of distant metastasis or any suggestive metastatic lymph node. Clinically, stage IB was suggested and radical hysterectomy, bilateral salpingo-oophorectomy with pelvic and para-aortic lymph node dissection was performed. In exploration uterus was larger than normal, there was not any adnexal pathology, and there were no enlarged pelvic para-aortic lymph nodes or ascites. During the para-aortic lymph node dissection, we encountered one artery and 2 veins, one centimeter under inferior mesenteric artery. They were thought to be ovarian artery and ovarian vein. When adipose tissue was dissected, right ectopic kidney with ureter was detected. Kidney was located between the level of L2-L3 to L4-L5 intervertebral space. In the literature, there has been lots of idiopathic cases. The ectopic kidney might be located in the pelvis, abdomen, and the thorax and also might be unilateral or bilateral. In the litera-



Figure 1. Renal ectopic kidney

ture, the most frequent cases of renal ectopia described male's right side of the pelvis. Uterine cervical cancer is the second most common gynecological malignancy. The cervical cancer is generally characterized by local invasion through interstitial spaces of the pelvic tissue and by circulatory pathway of lymph dissemination through the lymph nodes of uterus and cervix. Surgical staging has been demonstrated to be the best option for establishing the status of para-aortic node in women with cervical cancer. Standard treatment for patients with early stage cervical cancer is radical hysterectomy, pelvic and para-aortic lymphadenectomy. This has the risk of intraoperative accidents and postoperative associated morbidity. During the radical surgery operations accidental damage of the small intestine or the colon or bladder or vessels might be occurred. However the ectopic renal tissue with vascular involvement was rare condition and might be careful during the para-aortic lymph node dissection in the gynecologic surgery.

Keywords: Cervical cancer, lymphadenectomy, renal ectopic kidney

[OP-177]

Synchronous primary malignant tumors of female genital tract: A case report of endometrial endometrioid adenocarcinoma coexisted with ovarian papillary serous adenocarcinoma

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Objective: Coexistence of endometrial and ovarian tumor is the most frequent among the synchronous primary malignancies of female genital tract (1). We describe a case of endometrial endometrioid adenocarcinoma coexisted with ovarian papillary serous adenocarcinoma in a woman presenting postmenopausal bleeding. The Objective of this report, pointing the early diagnosis of asymptomatic ovarian tumor due to synchronous primary endometrial tumor.

Case Report: A 70-year-old woman complained vaginal bleeding of 6 months' duration. Her last menstrual period was at age of 52. She had a history of hypertension, non-insulin dependent diabetes mellitus and total thyroidectomy for papillary thyroid cancer 20 years ago. Family history of malignancy was negative. General examination including breasts were unremarkable. Pelvic examination revealed palpable ovaries. Right and left ovary were 44x32x21mm and 34x27x20mm in size; respectively and endometrial line was slightly uneven with transvaginal sonography. Neither a mass lesion nor ascites was found with magnetic resonance imaging. CA 125 was in normal range. Endometrial biopsy revealed glandular hyperplasia. In explorative laparotomy, papillary structures on the ovarian surfaces raised suspicion of ma-

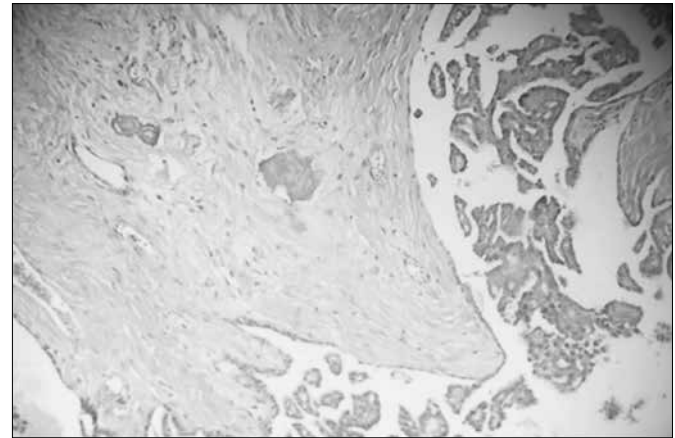


Figure 1. Psammomatous calcifications, Papillary serous adenocarcinoma, Ovary, HE, x100

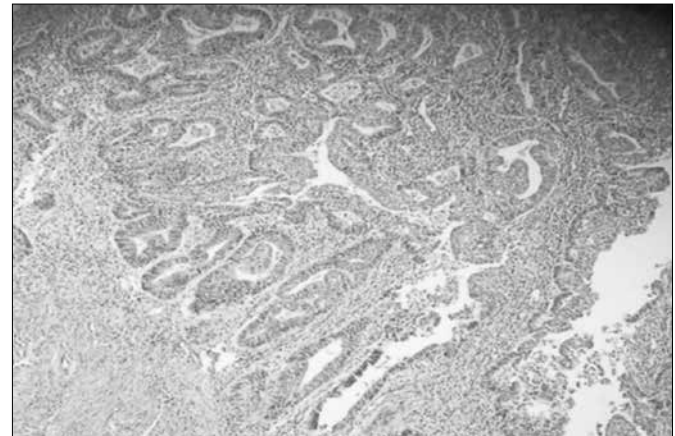


Figure 2. Endometrioid adenocarcinoma, Endometrium, HE, x100

lignancy. Frozen section of the ovaries detected papillary serous adenocarcinoma bilaterally. Total abdominal hysterectomy and bilateral salpingo-oophorectomy with pelvic and para-aortic lymphadenectomy were performed. Pathologic evaluation revealed endometrial endometrioid adenocarcinoma FIGO stage 1C coexisted with primary ovarian papillary serous adenocarcinoma FIGO stage 1C (Figure 1,2). Postoperative management was planned considering two different primary malignancies. Adjuvant chemotherapy with carboplatin and paclitaxel was given postoperatively. The patient was free of disease after 6 months of follow-up.

Conclusion: Synchronous primary malignancy of female genital tract is a rare condition but increasing incidence has been reported (2). Endometrial and ovarian cancers constitute the most common combination (1,2). Prognosis of synchronous tumors is related to the stages of each different disease (3). Early occurrence of abnormal bleeding as evidence of endometrial cancer may also lead the early diagnosis of ovarian cancer which is mostly asymptomatic until the advanced stages of the disease. Therefore, it's thought to be complicated to manage both endometrial and ovarian tumor at the same time, but the prognosis may be better than one of them alone with metastasis to another part of the genital tract, because of the early detection of ovarian cancer as a second primary tumor.

Keywords: Endometrioid adenocarcinoma, papillary serous adenocarcinoma, synchronous primary tumor

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[OP-178]

Carcinosarcoma of the fallopian tube: rare case

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Objective: Carcinosarcomas of the fallopian tube are extremely rare. Here we present a case of primary carcinosarcoma of the right fallopian tube.

Case Report: A 55-years old postmenopausal, para 2, Turkish woman was referred to our clinic with pelvic pain. Patient had a history of breast cancer and she was operated 7 years ago. Adjuvant radiotherapy and chemotherapy were also given. No significant familial history

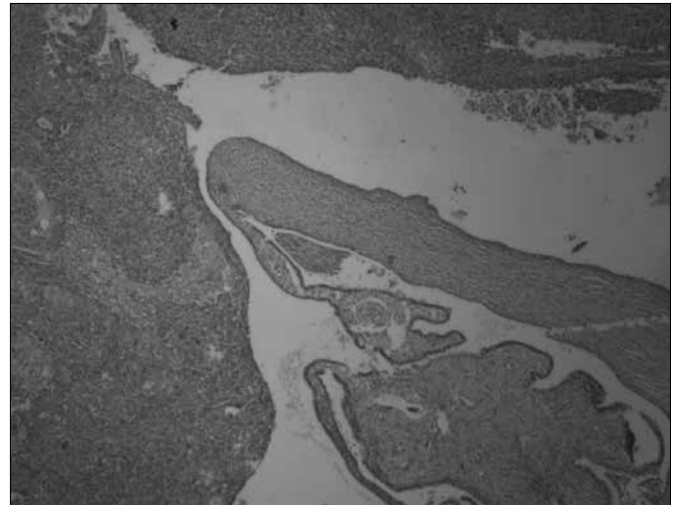


Figure 1. The fallopian tube is completely filled with mesenchymal and epithelial components of malignant mixed Mullerian tumor (H & EX40)

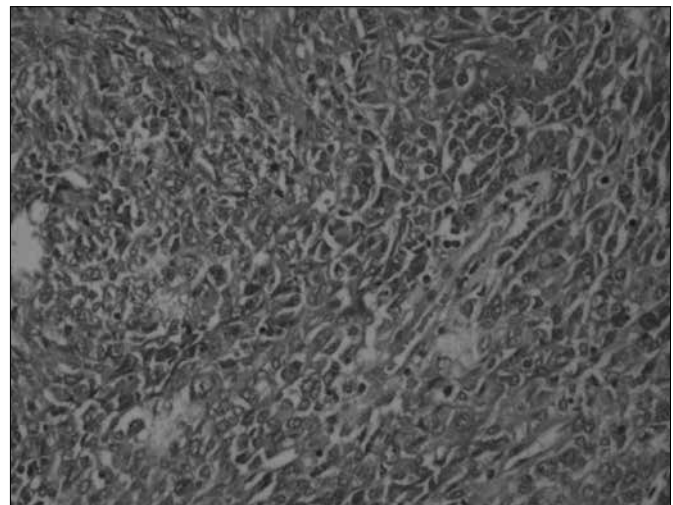


Figure 2. The fallopian tube is completely filled with mesenchymal and epithelial components of malignant mixed Mullerian tumor (H & EX400)

was noted. A solid mass in size of 5cm on the right adnexa was determined by the transvaginal ultrasonography. Abdominopelvic MRI was administered and no further findings was reported. While CA125 was 79 U/mL, CEA, CA19-9 and CA 15-3 was normal. Physical examination, mammography and ultrasonography of the contralateral breast were normal. Colonoscopy and gastroendoscopy were reported as normal, also. Upon these findings, laparotomy was performed. On exploration, right tube was swell and in view of completely infiltrated mass. Uterus, bilateral ovaries, left tube, peritoneal surfaces, omentum and upper abdomen were normal. Total abdominal Hysterectomy, bilateral salpingo-oophorectomy, bilateral pelvic paraaortic lymphadenectomy and omentectomy were made. Frozen section and final pathology result was reported as stage 1c carcinosarcoma of the tube. Six cycle of taxol-carboplatin chemotherapy was decided by the gynecologic oncology council.

Conclusion: Cause of the rarity of the fallopian tube carcinosarcomas, data about the best treatment strategies are limited. However, maximal cytoreduction followed by platinum based chemotherapy seems to be an appropriate treatment.

Keywords: Carcinosarcoma, malignant mixed müllerian tumor, fallopian tube

[OP-179]

A case of endometrial cancer presenting with acetabular metastasis

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Objective: Acetabulum is uncommon extraordinary anatomic place for endometrial cancer metastasis. Here we report a case of primary bone metastasis as initial presentation of the endometrial cancer.

Case Report: A 67 years old nulliparous Turkish woman admitted to the hospital with right hip pain. Left salpingo-oophorectomy was performed in the past because of benign ovarian cyst. No systemic disease other than hypertension and no significant familial history was noted. MRI was realized and a mass in size of 40x66 mm was reported in the posterior of the right acetabulum. Biopsy of the mass was taken and the result was recorded as metastatic adenocarcinoma. In order to determine the primary focus PET CT was carried out. PET CT revealed that a mass of approximately 78x63 mm causing significant destruction of bone on the right acetabulum and a heterogeneous increase of F-18 FDG uptake (SUVmax: 11.8) was noticed. Further, irregular enlarged endometrial cavity and increased F-18 FDG involvement (SUVmax:13,4) was observed. Hence, gynecological consultation was requested. Endometrial biopsy was applied and the result was reported as endometrial adenocarcinoma FIGO grade 2. Therefore,

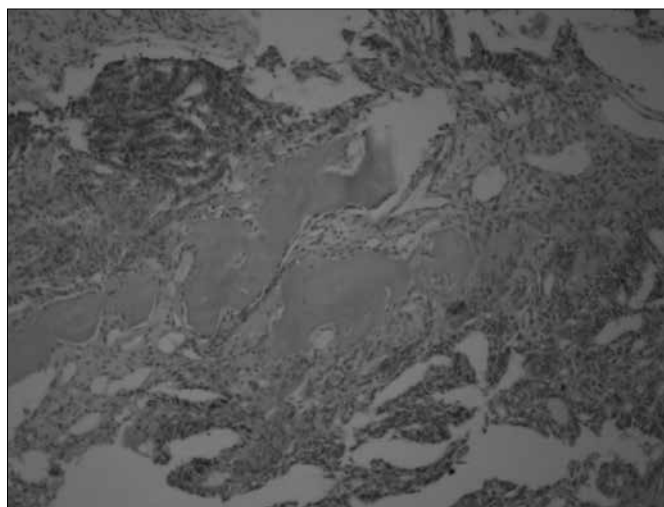


Figure 1. Tumor islands consisting of atypical epithelial cells between bone fragments are monitored in samples taken from a mass in the right acetabular region

total abdominal hysterectomy+ right salpingo-oophorectomy + left salpingectomy + bilateral pelvic para-aortic lymphadenectomy was administered to the patient. Gross pathological examination's result was noted as; endometrial adenocarcinoma FIGO grade 2. Radiotherapy and chemotherapy were planned to the patient by a decision of the gynecologic oncology council.

Conclusion: Endometrial biopsy should be included in the patient's screening when investigated for metastatic bone adenocarcinoma.

Keywords: Endometrial cancer, bone metastasis, acetabulum

[OP-181]

Ovarian hyper stimulation syndrome presented with isolated unilateral right side hydrothorax: two cases and systematic review of the literature

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Objective: The incidence of severe OHSS in infertility treatment is around 1% (1). Although hydrothorax might accompany up to 10% of cases with severe OHSS having significant abdominal ascites (2), there are a few cases reported to have isolated pleural effusion (3-28). Herein, we aimed to report 2 patients with isolated right-side hydrothorax without any significant abdominal fluid following the infertility treatment. Secondly, we performed a systematic review to describe risk factors for isolated hydrothorax and find out an explanation that can achieve a mechanism for this clinic entity.

Case 1: A 28-years old, an infertile patient admitted to emergency service with dyspnea, chest pain, tachypnea and tachycardia eight days after ovulation triggering. She had been treated with intrauterine insemination (IUI) following ovulation induction with exogenous gonadotropin. Cycle characteristics and blood tests were given in Table 1. Whereas only small amount of fluid accumulation was noticed in the recto-uterine pouch, chest X-ray (Figure 1a) and thorax computerized tomography revealed a right-sided unilateral pleural effusion (Figure 1b). Her symptoms revealed immediately after drainage of 1500 mL serous pleural effusion.

Case 2: A 31-years old, an infertile patient admitted to emergency service with dyspnea, chest pain, tachypnea and tachycardia four days after ovulation triggering with a GnRH analogue and 1500 IU hCG rescue. She had undergone intracytoplasmic sperm injection and embryo transfer cycle. Since she did not had significant abdominal ascites, chest X-ray was performed that subsequently revealed right-sided pleural effusion. Nevertheless, her symptoms relieved following transthoracic paracentesis of 1500 mL serous fluid. We decided to vitrify all available embryos. Results of the Literature Review: We systematically reviewed the current literature for reported cases of isolated hydrothorax after any infertility treatment. Accompanying

Table 1. The available English literature reporting isolated hydrothorax without accompanying abdominal ascites as unusual manifestation of ovarian hyper stimulation syndrome (1990 – 2016)

Reference	Age (years)	Treatment	E2 max pg/ml	Retrieved oocyte (n)	Starting day of symptoms after Triggering d	Admitted service or department	Hydrothorax sight	Laboratory findings Hemoglobin / Hematocrit / White Blood Cell	Total drainage (ml)
Hsieh MJ, 1994	30	GIFT	NA	NA	6	Emergency	Right	NA/ NA/ NA	6800
Levin MF, 1995	28-43(5 case)	IUI and IVF	NA	NA	NA	NA	Right	NA/ NA/ NA	NA
Arikan G, 1997	29	ICSI	1510	NA	14	OB/ GYN	Left dominance	NA/ 49.0%/35.7x10 ³	4000
	30	IVF	694	22	8	OB/ GYN	NA	NA/ 47.0%/15.2x10 ³	Conservative
Man A, 1997	27a (24-29)	IUI	NA	NA	9	Pulmonary Disease	Right	NA/ NA/ NA	2000
	27a (24-29)	IUI	NA	NA	12	Pulmonary Disease	Left	NA/ NA/ NA	2000
	27a (24-29)	IVF	NA	NA	NA	Pulmonary Disease	Right	NA/ NA/ NA	1500
	27a (24-29)	IVF	NA	NA	NA	Pulmonary Disease	Right	NA/ NA/ NA	1200
Friedler S, 1998	29b	ICSI	2536	27	14	OB/ GYN	Right	11.8 mg/dl / 35.0% / 13.9x10 ³	1700
	29b	ICSI	3000	22	7	OB/ GYN	Right	10.9 mg/dl / 32.0% / 9.8x10 ³	Conservative
	33	ICSI	3000	19	7	OB/ GYN	Right	15.4 mg/dl / 46.0% / 20x10 ³	4500
Wood N, 1998	29	IVF	3479	18	9	OB/ GYN	Right	17.4 mg/dl / 51.4 % / NA	800
Jacob S, 1999	31	IVF	3405c	24	14	OB/ GYN	Left	17.0 mg/dl / NA / 28x10 ³	Conservative
Roden S, 1999	34	IVF	3214	NA	7	Pulmonary Disease	Right	NA / 46.0% / 12.7x10 ³	1000
	33	IVF	NA	NA	14	Pulmonary Disease	Right	NA / 48.0% / 13.6x10 ³	Conservative
	29	IVF	NA	NA	8	Pulmonary Disease	Right	NA / 50.0% / 18.6x10 ³	Conservative
Rabinerson D, 2000	35	IVF	7340	13	16	OB/ GYN	Right	NA/ NA/ NA	6800
Tansutthiwong AA, 2000	38	IVF	3322	10	14	OB/ GYN	Right	NA/ 44.0% / NA	3800
Thomas F, 2003	35	IVF	NA	NA	4	Emergency	Right	14.8mg/dl / NA / 22.2x10 ³	10000
Aldawood AS, 2003	36	IVF	4358c	25	5	OB/ GYN	Right	NA / 49.0% / 15x10 ³	7200
Murray A, 2004	33	ICSI	9868	26	7	OB/ GYN	Right dominance	13.8 mg/dl / 40.0% / NA	Right: 7850, Left: 450
Qublan HS, 2006	29	IVF	2700	NA	NA	OB/ GYN	Right	NA / 35.0% / 13.9x10 ³	1300
Tang HH, 2007	35	IVF	2052	8	NA	Emergency	Right	13.6mg/dl / 38.6% / 15.9x10 ³	Conservative
El-Toukhy T, 2007	41	IVF	NA	9	NA	Emergency	Right	NA / 42.0% / 13x10 ³	6000
Ciepiela P, 2007	32	ICSI	NA	8	8	OB/ GYN	Right	NA/ NA/ NA	1600
Beji O, 2008	26	IVF	NA	NA	4	Emergency	Right dominance	11.7 mg/dl / 49.0% / 21x10 ³	5300 (Total right and left)
Yildizhan R, 2008	24	IVF	4000	NA	NA	Emergency	Right	18.0 mg/dl / 52.0% / 29x10 ³	T/S, NA
Gupta S, 2009	21	IUI to IVF	1272	10	16	OB/ GYN	Right dominance	NA / 34.0% / 11x10 ³	Conservative
George K, 2010	24	IUI to IVF	4000	NA/freeze	4	OB/ GYN	Right	NA / 40.2% / NA	900
Mullin CM, 2011	25	IVF	3731	44	4	OB/ GYN	Right	NA / 44.0% / NA	2900
	41	IVF	2552	18	6	OB/ GYN	Right	NA / 48.4% / NA	4850
Junqueira JJM, 2012	27	IVF	NA	NA	9	Thorax surgery	Right dominance	NA / 40.5% / 23.2x10 ³	Right: 10700, Left: 6640
	30	IVF	NA	NA	12	Thorax surgery	Right dominance	NA / 53.7% / 20.4x10 ³	Right: 22360, Left: 650
	33	IVF	NA	NA	8	Thorax surgery	Right dominance	NA / 47.0% / 26.3x10 ³	Right: 11580, Left: 8100
Bass L, 2012	29	IVF	NA	NA	15	Emergency	Right	16.3 mg/dl / 48.8% / 23.2x10 ³	T/S, NA
Presented Case-1	28	IUI	2100	NA	8	Emergency	Right	15.1 mg/dl / 45.9% / 16.4x10 ³	1500
Presented Case-2	31	ICSI	2890	21/freeze	4	OB/ GYN	Right	14.9 mg/dl / 44.0% / 15.8x10 ³	1500

a Mean age; b Same patient with 2 cycles; c Converted from pmol/L; d Calculated according to ET day; NA: not applicable or not available; T/S: Thoracentesis

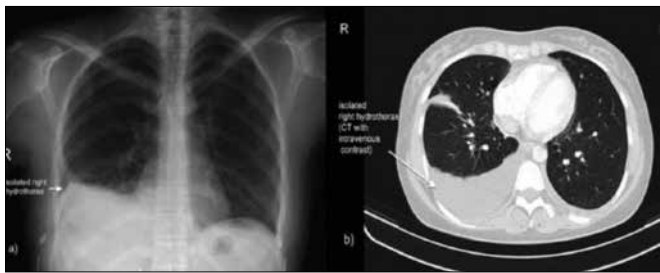


Figure 1.

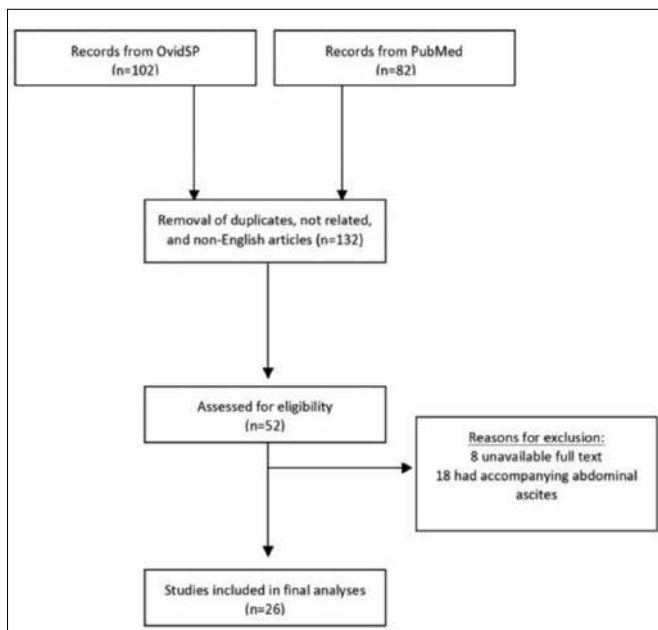


Figure 2. The PRISMA flow diagram

ascites were taken as exclusion criteria (Figure 2). The available data from 26 report suggest that a 92.5% (37/40) of the isolated hydrothorax present with right side dominance. For the respect of estradiol levels on the day of triggering, 17 out of 21 reports noticed $<4000\text{pg/mL}$. In addition, Htc was $<45\%$ 12 out of 27 on the day of admission (Table 1). According to available literature, the leading explanation for isolated hydrothorax appears to be "Porous Diaphragm Syndrome" (29). Previously, it was accused for many clinical situations including Meigs' syndrome, peritoneal dialysis-related hydrothorax and hepatic hydrothorax. In this syndrome, mainly, negative hydrostatic pressure during inspiration leads fluid escape from right-upper abdominal quadrant throughout the diaphragm to the pleural cavity. Piston-like motion of liver capsule might also contribute to the amount of fluid that has been transporting.

Conclusion: Isolated hydrothorax is an uncommon and unpredictable event, which may even complicate women with low estradiol levels or hematocrit concentrations. The clinicians should keep in mind the possibility of isolated hydrothorax particularly when respiratory symptoms are significant and abdominal ascites is not evident. In the view of clinic practice, performing thoracic ultrasonography simultaneously with abdominal scanning for abdominal ascites might be useful to shorten the duration of diagnosis. Chest x-ray and computerized CT should be preferred for selected cases to exclude the diagnosis of pulmonary embolism.

Keywords: Ovarian hyper stimulation syndrome, isolated unilateral hydrothorax, isolated pleural effusion

[OP-182]

Extreme leukocytosis in obstetric patients

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Objective: Normal pregnancy is characterized by profound changes in hematologic system to compensate the demands of the fetoplacental unit. The most significant hematological changes during pregnancy include physiologic anemia, neutrophilia, mild thrombocytopenia, increased procoagulant factors and diminished fibrinolysis. The complete blood count (CBC) is ordered routinely in pregnant women. Leukocytosis is defined as total WBC count more than $11000/\mu\text{L}$ in adults. During pregnancy, WBC count increase gradually. It is important to distinguish normal increase in WBC count from abnormal increase during pregnancy and postpartum period.

We aimed to determine relationship between high WBC count and abnormal conditions (Table 1).

Case 1: A 32-year-old woman had been referred with labor pain at 39 weeks of gestation. WBC count was $21000/\mu\text{L}$ preoperatively, $119000/\mu\text{L}$ postoperatively. Then she was consulted with Hematology-Oncology Department by which she was taken over with the diagnosis of acute lymphoblastic leukemia (ALL).

Case 2: A 23-year-old woman had been admitted with labor pain at 38 weeks of gestation. On admission, her leukocyte count was $83000/\mu\text{L}$. Postoperatively WBC count was $86000/\mu\text{L}$ and $55000/\mu\text{L}$. Abdominal and chest tomography was done and hepatosplenomegaly was identified and presence of lymphadenopathy was noticed. With confirmatory tests, lymphoma was diagnosed and management was planned with Hematology-Oncology Department.

Case 3: A 20-year-old woman had been consulted to our clinics with the complaints of fever, pelvic pain, foul-smelling discharge and surgical site infection. She gave healthy birth 6 days ago with cesarean section. WBC count was $42000/\mu\text{L}$ preoperatively, $54000/\mu\text{L}$ postoperatively. The reason for these adverse postpartum events was chorioamnionitis.

Case 4: A 26-year-old woman had been admitted with epigastric pain, hypertension and vaginal bleeding in the 33th weeks of gestation. Because placental abruption had occurred, cesarean delivery was performed. WBC count was $43000/\mu\text{L}$ preoperatively, $56000/\mu\text{L}$ postoperatively. This high WBC count was a clue for preeclampsia.

Case 5: A 19-year-old woman had been consulted to Emergency Service in cardiac arrest. She had given vaginal birth nine days ago at 31st

White blood cell count and diagnosis of patients

Cases	White Blood Cell Count (μL)	Diagnosis
1	119000	Acute Lymphoblastic Leukemia
2	83000	Lymphoma
3	54000	Chorioamnionitis
4	56000	Preeclampsia
5	41600	Addiction
6	55600	Acute Lymphoblastic Leukemia

weeks of gestation. Leukocyte count was 41600/ μ L. It was understood from the patient's records that there had been leukocytosis during labor. She was addicted bonzai and used during pregnancy.

Case 6: A 19-year-old woman had been referred with labor pain at 32 weeks of gestation. With the indication of fetal distress, a girl was delivered by cesarean section. WBC count was 46000/ μ L preoperatively, 55600/ μ L postoperatively. The patient was taken over by Hematology-Oncology Department for management of ALL.

Conclusion: CBC is ordered routinely in all pregnant women. WBC count is less focused as a component of CBC unless there is any suspicion of infection. But it is important to be aware that leukocytosis could be a hallmark of any disease. Although not specific, many obstetrical complications and adverse pregnancy outcomes such as preterm delivery, gestational diabetes mellitus or hypertension could be understood with high WBC count. Hematological malignancies may not be understood during pregnancy because symptoms of these malignancies are similar to normal symptoms of pregnancy. So this overlapping symptomology may cause a delay in diagnosis.

Keywords: Leukocytosis, pregnancy, puerperium, leukemia, lymphoma

[OP-184]

The family with Bartsocas Papas Syndrome from Turkey

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Introduction: The first case of Bartsocas Papas Syndrome (BPS) was recorded in 1600 but Bartsocas and Papas was described in 1972 in the heredity pattern and other anomalies. The frequency of BPS is 1:650000. The majority of the cases were among consanguineous Mediterranean families. BPS is a lethal form of Popliteal Pterygium Syndrome (PPS), but BPS is seen in hands, feet and facial abnormalities more often than PPS. BPS is a rare, autosomal recessively inherited form of the PPS characterized by microcephaly, severe popliteal webbing, oligosyndactyly, genital abnormalities, a typical face with short palpebral fissures, ankyloblepharon, hypoplastic nose, filiform bands between the jaws and facial clefts, and other ectodermal anomalies (i.e. loss of hair, eyebrows, lashes, nails). Most cases were born between 30 and 38 weeks. With ultrasound in the first trimester the identification of limb abnormalities can be diagnosed. Genetic mutations in IRF6 gene have been identified with severe PPS, this has not been replicated in the cases with BPS. Visceral organs may be affected but usually they are reported as normal and functioning. Namely, the urogenital tract abnormalities of BPS are dysplastic kidneys, blind-ending ureters, dilated bladder, and absence of urethra. Children with BPS are thought to have normal cognitive functions. It is often fatal in the neonatal period, but patients living until childhood have been reported.

Case Report: In our case; a 34-year-old Turkish woman was first seen for contraction in Emergency at 33 weeks. She and her 38-year-old husband were consanguineous, related through her mother and his father so they were a case of cross-cousin marriage family. She and her husband and their brothers had BPS children who could not take the first breath. 6 newborn died in the neonatal period. 1 child is 4 years old and his treat-

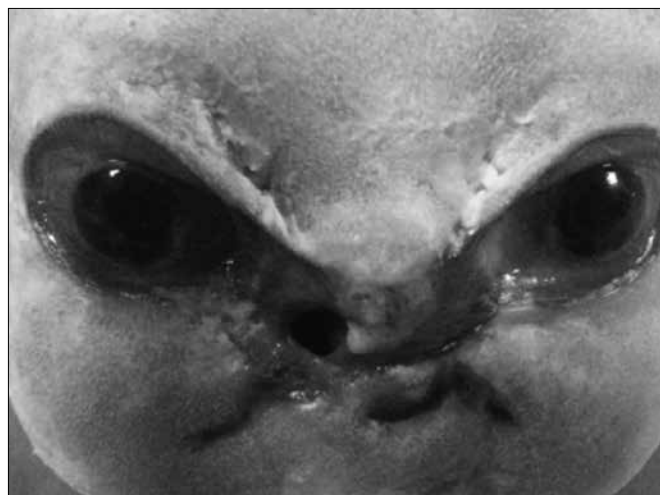


Figure 1. The face of the newborn had mid facial cleft, lowset ears, cleft lip, ectropion of the eyelids



Figure 2. The newborn had bilateral pterygia, bilateral popliteal and thick skin bands connecting the upper part of genitalia and soles of both feet, talipes equinovarus with hypoplastic toes, syndactyly bilaterally

ment is in progress. When she came in hospital, her vaginal examination was 8-9 cm cervical dilation and 80-90% effacement. Fetal membranes were intact and fetal presentation was vertex. She was prepared quickly for the vaginal delivery. The newborn had mid facial cleft, lowset ears, cleft lip bilateral pterygia, bilateral popliteal and thick skin bands connecting the upper part of genitalia and soles both feet, talipes equinovarus with hypoplastic toes, syndactyly bilaterally. Obstructive apnea was noted and an emergency intervention was performed. But even though an intervention was applied, the newborn died. Postmortem examination of the newborn in ultrasonografi and X-Ray, the visceral organs and skeletal were seen as normal. The family didn't avow the genetic tests.

Conclusion: BPS is seen more often in Mediterranean countries and when the literature is investigated it is seen that this form which is deadly and hereditary transitive is repeated for generations. As in our case due to the reasons like continuation of lineage and ostracisation deadly incidents and sick children are not revealed and marriages among relatives are realized. Especially, providing genetrical consulting to families with low socioeconomic levels may cause a serious decline in the incidence rate of the disease.

Keywords: Bartsocas Papas Syndrome, Popliteal Pterygium Syndrome

[OP-185]

Ligneous inflammation of female genital tract and conjunctiva associated with plasminogen deficiency: A case report

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Introduction: Ligneous inflammation is a rare condition that characterized by accumulations of fibrin-rich eosinophilic material in a variety of anatomic locations such as conjunctiva, oral cavity, respiratory tract, gastrointestinal tract, kidneys and female genital tract. It is an autosomal recessive chronic inflammatory disorder with recurrences, and unfortunately there is no curative treatment. It is caused by plasminogen deficiency. We present a patient with multifocal ligneous inflammation involving her genital tract and conjunctiva, which was associated with plasminogen deficiency that proven by laboratory and molecular measurements.

Case Report: A 45-year-old G0P0 woman presented at our gynecology clinic with a lack of sexual intercourse and white vaginal discharge which included white plaques. She had also been suffering from primary infertility for 20 years. On gynecologic examination, the vagina was completely covered with dense and white plaque so the speculum could not be placed in the vagina. When we attempt to manually excise the lesion in the vagina, gave an interesting feeling reminiscent of surface of candle. Transvaginal ultrasonography found that uterus, ovaries and endometrium were normal. A 38 mm subserosal fibroid in the right side of fundus and 17 mm intramural fibroid which was localized in posterior corpus were observed. A 42 mm length and 22 mm width

hypoechoic and avascular lesion was observed in the vagina. The endometrial thickness was 7 mm. The MRI analysis revealed that the distal lumen of vagina was closed, and a collection with an anteroposterior diameter of 30 mm that was extended to cervix and likely to be hydrocolpos was observed in the proximal lumen of vagina. In her medical history, a vaginal dilatation with hegar plugs was applied 16 years ago when she presented with the same complaints. One important points was a remarkable fusion of her left eyelid. In the medical investigation of infertility, her basal hormones and her husband's spermiogram was normal. Plasminogen functional activity was 9 % of normal (reference, 55-145%). Firstly biopsy was taken from lesion in the vagina. The histopathological report revealed mild squamous epithelial hyperplasia, spongiotic dermatitis and subepithelial accumulation of hyalinizing proteinaceous material and it was consistent with ligneous inflammation. Then, under general anesthesia, the fibrinous material in the vagina was evacuated by blunt and sharp dissection and then the cervix was visualized (Figure 1). She underwent vaginoscopy and hysteroscopy. The endocervical canal, uterine cavity and bilateral tubal orifices were normal.

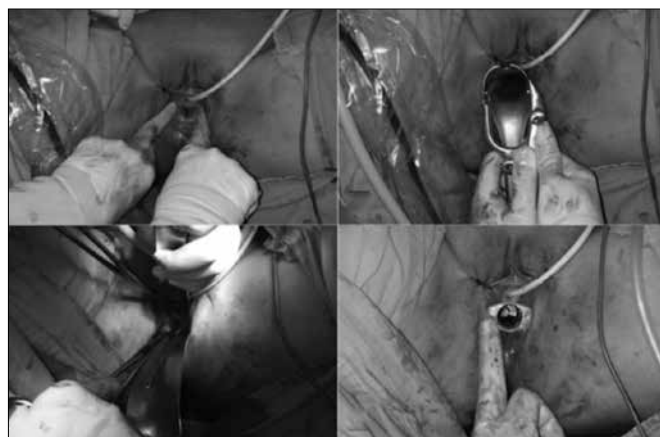


Figure 1. Intraoperative photos



Figure 2. The view of vaginal prosthesis

The cervical smear and endometrial biopsy were taken. Local estrogen and the vaginal prosthesis that was designed according to the patient's vagina was applied for 3-6 month (Figure 2). Her endometrial biopsy revealed endometrial hyperplasia without atypia so she underwent progesterone treatment for 3 months, subsequent biopsy was normal. Smear report revealed ASCUS. The result of smear, which was obtained after the treatment of vaginal infections, was normal. Now, our patient have regular menstrual cycles and she does not experience a problem with sexual intercourse.

Conclusion: Most gynecologists are unfamiliar with this diagnosis, and lack of awareness of this unusual entity can cause diagnostic difficulties.

Keywords: Ligneous inflammation, genital tract, conjunctiva, plasminogen deficiency

[OP-186]

A case of glioma arising in an ovarian mature cystic teratoma

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Objective: We describe a case of glioma arising in an ovarian mature cystic teratoma. It is important for both pathologists and clinicians to be aware of this uncommon entity to avoid misdiagnosis of gliomatosis peritonei (GTS) as recurrence of immature teratoma and disease progression.

Material and Methods: A 26-year-old nullipar woman presented with a history of 5 months of pelvic pain and persisting ovarian cyst. An ultrasound examination showed a cystic mass approximately 7 cm in diameter arising in the left adnexia. There was no hyperechogenic zones or other findings in pelvic ultrasonography. Serum levels of CA 125 and AFP (alphafetoprotein) were within normal limits. Laparoscopy was performed. A cystic ovoid mass was found arising from the left adnex. The external surface was smooth uterus, other pelvic structures and the liver were grossly normal. Cytectomy was performed as fertility preserving surgery. Pathologic and immunohistochemical examination showed glial cells, but no mitotic activity, no necrosis, no immature component. GFAP(+) and Ki-67-labeling index was about 1-2 % These findings were consistent with a low-grade glioma arising in a mature ovarian cystic teratoma. Cyst relapsed within 3 months after the first operation in this case.

Results: Ovarian mature teratomas are full of surprises because their structure driving from the three germ layer. Tumors of neuroepithelial origin are extremely rare in mature teratomas. We report a case of ovarian mature teratoma in which glial cell arising in. Ovarian teratomas account for approximately 25% of all ovarian tumors. Malignant transformation is uncommon and is seen in approximately 2% of cases, usually in older women, the most common malignancy is squamous cell carcinoma (75% to 80%). Peritoneal, omental biopsies and the peritoneal washing are important. GTS is defined as nodules of mature glial tissue in the peritoneal cavity and omentum in patient with ovarian teratoma. GTS is refractory to chemotherapy and radiotherapy, surgery is the main modality of treatment and if incomplete, long-term follow-up with imaging is recommended.

Conclusion: The implant of the mature glial cells has a high risk of relapse, as seen in our case, thus close follow-up of the patient is necessary.

Keywords: Ovarian glioma, ovarian teratoma

[OP-187]

Two cases of vanishing endometrial carcinoma

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Introduction: To present two cases which had been diagnosed to have endometrioid type endometrial carcinoma on endometrial samplings however, histological examination of subsequent hysterectomy specimens had revealed no residual cancer.

Case 1: A 64 years old woman presented with postmenopausal bleeding. Her Body-Mass-Index (BMI) was 18. She was receiving no hormone replacement therapy. Ultrasonography revealed 8 mm endometrial thickness and normal ovaries. Endometrial sampling was performed. Histological examination revealed malignant epithelial tumor cells without identification of endocervical/endometrial origin. Cervical smear was reported as normal. No preoperative progestin therapy was not applied. About 2 weeks later she underwent surgery including peritoneal washing, total abdominal hysterectomy with bilateral salpingoopherectomy (TAH-BSO), omentectomy and bilateral pelvic and paraaortic lymphadenectomy. There was no remarkable gross pathology within the cervical canal and endometrium. In histopathological examination, there was no malignancy in either frozen section or final pathology report in any of the specimens removed during the surgery.

Case 2: A 51 years old perimenopausal woman presented with abnormal vaginal bleeding. Endometrial biopsy was performed by use of the D&C technique and displayed endometrioid-type endometrial carcinoma on polyp surface which was reported to have nuclear grade 2 and histologic grade 1 together with focal areas of hyperplasia with complex atypia and necrosis. She received no preoperative progestin therapy. She underwent surgery 1 week after the biopsy including peritoneal washing, TAH-BSO, omentectomy and bilateral pelvic and paraaortic lymphadenectomy. Thorough frozen section and final examination of the hysterectomy specimen revealed no residual tumor but foci of hyperplasia with complex atypia on polyp surface. Other specimens removed during the surgery were also negative for malignancy. Previous slides of endometrial biopsy were reviewed and confirmed the diagnosis of endometrial carcinoma. After 4 months surgery she was well with no evidence of disease and was not on any adjuvant therapy. In both of the hysterectomy specimens, there were no overt findings pertaining to a post-biopsy reparative process such as necrosis, vascular thrombi or giant cell reaction.

Conclusion: Diagnosis of gynecological cancers is made by biopsy before radical surgery except for ovarian cancers. Endometrial biopsy is the gold standard diagnostic tool for endometrial cancer. In some cancers such as prostate and colon as well endometrial cancer final tissue may not confirm presence of cancer despite initial biopsy is positive for malignancy. This is called vanishing cancer. In this report, we presented two cases which had been diagnosed endometrioid type endometrial carcinoma on endometrial biopsy sampling. However, in hysterectomy specimen there was no residual cancer. Clinicians should be aware of this phenomenon which may cause medicolegal issues as well as clinical challenges.

Keywords: Vanishing endometrium cancer

[OP-188]

Incarcerated retroverted gravid uterus misdiagnosed of recurrent urinary tract infectionErhan Aktürk¹, Aşkın Evren Güler²¹Department of Obstetrics and Gynecology, Adana Military Hospital, Turkey²Department of Obstetrics and Gynecology, Koru Ankara Hospital, Turkey

Introduction: Incarceration of gravid uterus is a rare situation. It usually presents at 14-16 weeks of pregnancy with the complaints of abdominal pain and the urinary problems. We report a case of incarcerated retroverted gravid uterus presenting at 17 weeks of gestation with misdiagnose of recurrent urinary tract infection for 4 weeks.

Case Report: A 23 year old primigravida was admitted to our outpatient department at 17 weeks of gestation. She was having continuous lower abdominal pain and increasing difficulty to empty bladder for 4 weeks. She had been diagnosed as recurrent urinary tract infection and had been given antibiotherapy by an out-center. In her examination her cervix could not be visualized entirely due to severe anterior location. Bimanual examination revealed diffuse tenderness and a palpable mass in the posterior cul de sac consistent with a retroverted uterus, but otherwise no gross abnormalities. The remainder of her physical, obstetric, laboratory and ultrasonographic examinations were unremarkable. Attempts to manually reduce the incarceration by intravaginal and intrarectal pressures in knee-chest position were successful. She was discharged with a viable pregnancy and with no complaints.

Discussion: Incarceration of the uterus is a rare complication, occurring in one of 3000 cases. Usually the retroverted uterus undergoes spontaneous correction in the early second trimester. However, a retroverted or retroflexed uterus can become entrapped between the subpromontory sacrum and the pubis. Factors and preexisting conditions that may predispose a patient to an incarcerated uterus include: multiparity, adhesions from endometriosis or prior pelvic inflammatory disease, anatomical abnormalities, pelvic tumors, and uterine fibroids. Presenting symptoms include: abdominal pain and urinary problems. If untreated, patients may go on to develop anterior uterine wall thinning or sacculation, bladder rupture, preterm labor, premature rupture of fetal membranes, spontaneous abortion, or uterine rupture during labor. Treatment includes first draining and decompressing the bladder with an indwelling catheter. Next, reduction of the uterus can be attempted by applying steady pressure with two fingers in the posterior vaginal fornix directing the uterus cephalad while the patient is in the dorsal lithotomy position, knee-chest position, or under anesthesia.

Keywords: Incarcerated uterus

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[OP-189]

Aspergillus in a cervico-vaginal smear of a postmenopausal femaleErhan Aktürk¹, İlhami Gül², Aşkın Evren Güler³¹Department of Obstetrics and Gynecology, Adana Military Hospital, Adana, Turkey²Department of Obstetrics and Gynecology, Ankara Military Hospital, Ankara, Turkey³Department of Obstetrics and Gynecology, Koru Ankara Hospital, Ankara, Turkey

Introduction: Aspergillus spp is a fungus known to cause both acquired and nosocomial infections in human beings and has opportunistic nature of infection in the immunocompromised state due to the underlying malignancy. The most commonly affected sites are the lungs, soft tissue, and skin.

We report here an unusual case in which Aspergillus spp. was detected in the cervical smear of a regularly menstruating female who presented with features of pelvic inflammatory disease.

Case Report: A 43 year-old regularly menstruating female was presented to our outpatient department with complaints of a foul-smelling vaginal discharge and pain in the suprapubic region and dyspareunia. Gynecological examination was unremarkable except for painful cervical motions and two-year presence of intrauterine device. Results of routine clinical and laboratory examinations, including blood glucose levels, were within normal limits. A routine Papanicolaou smear showed the features of inflammation and fungal structures with fruiting bodies consistent with the presence of Aspergillus spp, while background epithelial cells were negative for intraepithelial malignancy. The patient was offered therapy for pelvic inflammatory disease and intrauterine device was kept in place. After four week her control cervicovaginal smear is reported as negative for fungus and again negative for intraepithelial malignancy.

Discussion: The cervicovaginal pap smear is considered an important tool in diagnosing neoplastic lesions. It is also of use in detecting fungal infections especially Candida which shows spores in association with pseudohyphae and budding phenomenon. However, recognition of Aspergillus species requires the presence of characteristic fruiting body with acute angle branching hyphae and spores. It is important to discriminate between primary infection and contamination. In our case, the fruiting body was characteristic of Aspergillus species and present in the same plane with the cervical cells which indicated that there is no contamination. The respiratory system, as seen with aspergilloma, is the most common site of infection, as seen in opportunistic infections in immunocompromised patients. Disseminated disease almost always results from a primary pulmonary infection, but it can also occur from skin inoculation or when no likely entry source is identifiable. In the presented case, Aspergillus was incidentally encountered in a female who presented with pelvic inflammatory disease. The aim of this case report is to draw attention to an unusual site of infection by Aspergillus spp.

Keywords: Aspergillus, cervico-vaginal smear

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[OP-190]

Pelvic pain associated by levator ani syndrome and relieved with prilocaine injection

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Introduction: Levator ani syndrome (LAS) is a general term for chronic or recurring pain in the anal canal or rectum lasting at least 20 min, in the absence of structural or systemic disease explanations for these symptoms. Here we presented a case of levator ani syndrome pain of which spreaded to genital and pelvic regions.

Case Report: A 30 year old patient, attended our outpatient department because of anogenital pain. She described that the pain had started shortly after defaecation on that morning and spreaded gradually to genital and pelvic regions. She indicated that she felt as if there is an object within her rectum and vagina. Pain was constricting in nature, moderate but increasing in severity and 2 hours in duration. She had had 5 similar attacks in the past 3 months. And she had been administered oral and muscular analgesics by some clinics but her pain had not relieved and lasted for about 5 hours. Her examination by our general surgeon was unremarkable except for a mild rectal tenderness. Her medical history and gynecologic exam including pelvic ultrasonography was also unremarkable. We explained the presumptive diagnosis of LAS to her. Then we administered 5 cc prilocaine HCL into the bilateral pararectal area within the anorectal muscle fibers. Her pain was relieved thereafter. One, three and eleven months later she reappeared with the same complaint three times and we performed the same protocol to each episodes.

Discussion: Levator ani syndrome is a functional disorder in which recurrent or persistent distressing pain, pressure or discomfort is felt in the region of rectum, sacrum and coccyx that may be associated with the presence of pain in the gluteal region and thighs. In our case pain was not local to anal area but spreaded to genital region. Often no organic pathology is detected clinically.

Digital massage, sitz baths, muscle relaxants, electrogalvanic stimulation and biofeedback have all been reported to be effective in treating LAS and cause no harm. However, none of these treatment modalities have been evaluated further with controlled trials. Our case responded to pararectal injection of prilocaine HCL and the gaps between the pain attacks were lengthened gradually. We performed visual analog scale at each episode and we realised that severity of the pain was lower than the one before each time. We thought that all women with chronic pelvic pain should be inquired whether they have

any complaint with anal area and the physicians should keep in mind levator ani syndrome as a differential diagnosis.

Keywords: Levator ani syndrome

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[OP-191]

Non-surgical management of unruptured cornual pregnancies: A case series

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Objective: Cornual pregnancy is a rare form of ectopic pregnancy which complicates 2-4% of all ectopic pregnancies. Surgical and medical management is shown to be superior in treatment of cornual pregnancies. The aim of this study is to demonstrate the outcome of intralesional management and show the safety of local treatment.

Material and Methods: All cornual pregnancies were treated with local methotrexate (MTX) or potassium chloride (KCL) injection between December 2013 and February 2016. All cases were underwent a transvaginal ultrasound examination with the use of a 5-mHz transducer with Doppler facilities. Three criteria were considered which were defined by Timor-Tritsch et al. These are:

- An empty uterine cavity,
- A chorionic sac seen separately and >1 cm from the most lateral edge of the uterine cavity,
- A thin myometrial layer surrounding the gestational sac.

All patients and partners were counseled about the management al-

Table 1. Clinical characteristics of cases

Case no	Age	Gravidity/parity	Gestational week (mIU/ml)	β-hCG level before injection (days)	β-hCG clearance interval	Injected agent	Additional treatment
1	33	G5P0	6w4d	7253	45	MTX	-
2	35	G2P1	6w1d	6868	39	KCL	-
3	32	G2P1	5w6d	3243	32	MTX	-
4	29	G3P1	7w	9456	61	KCL	Systemic MTX
5	38	G1P0	7w2d	10648	58	KCL	-
6	31	G3P2	6w6d	8824	44	MTX	-
7	28	G1P0	6w1d	5246	29	MTX	-
8	34	G3P2	7w1d	12758	49	KCL	-

ternatives and informed consent was obtained. Laparoscopy equipment was ready in operation room in every procedure however surgery was not a necessity. In case of fetal heart beat observation KCL was injected and in case of no heart beat detection MTX was used. All KCL processes were restricted within 2 cc (from 1 mEq/ml KCL solution) and MTX were restricted to 12.5 mg totally for each patient. Under general anesthesia, a 17-gauge single lumen follicle aspiration needle was inserted in lateral fornix and passed through myometrium directly into the gestational sac under transvaginal guidance after sterile circumstances provided.

Results: Although it has been considered as a risk factor, none of the patients had previous ectopic pregnancy, history of infertility/ in vitro fertilization or cornual pregnancy.

Furthermore, habitual abortions were learned from the case no 1's medical history.

In four cases MTX was injected and three patients were received KCL as a local treatment. In case number 4, β -hCG was decreased until 17th day of injection and then drew a plateau. Intramuscular MTX was additionally injected to this patient and β -hCG was undetectable in 61st day. None of the patients were encountered neither intraabdominal/vaginal hemorrhage nor infection as a complication in peri/post-operative period.

Conclusion: There is numerous case series about the laparoscopic approach or systemic MTX in cornual pregnancies. Nevertheless in local approach, treatment agent can reach to effected area in high concentrations. We have preferred local approach to our patients who suffers from cornual pregnancy. The medicine choice had to be done according to viability of fetus and we have not observed any complications at the end of each patients follow up. Based on this case series local approach seems to be an effective and fertility sparing way for unruptured cornual pregnancies.

Keywords: Cornual pregnancy, methotrexate, potassium chloride

[OP-192]

Heterotopic cesarean scar pregnancy following in vitro fertilization

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Introduction: Heterotopic pregnancy is the coexistence of both an intrauterine and ectopic pregnancy. In Devoe and Pratt's study in 1948, it's incidence was reported to be 1/30,000. However, recent studies reported it's incidence as 1/3889 and may even be as high as 1/100 with the assistive reproductive technologies (ART). Although the rate of cesarean scar pregnancy is increasing as with the increasing rates of cesareans, it is still a rare type of ectopic pregnancy. In this report we present a heterotopic pregnancy case with the ectopic location at the cesarean scar.

Case Report: 41 year-old G4P3A0 gravida had one previous cesarean section 12 years ago. The patient had bilateral tubal ligation (Pomeroy method) together with that cesarean. After many years, patient re-

quested another pregnancy and therefore had intracytoplasmic sperm injection –embryo transfer (ICSI-ET) cycle. Two embryos were given and no anatomic difficulty was occurred during the embryo transfer. Thereafter, during the transvaginal ultrasound (TVUSG) scan at 6 weeks of gestation, the patient was diagnosed as heterotopic pregnancy in which the ectopic locus was on the cesarean scar. Vital signs were stable and laboratory findings were normal. TVUSG showed an intrauterine pregnancy with CRL: 6,2mm (6+3 weeks) and no cardiac activity together with another pregnancy located at the cesarean scar with CRL: 7,1 mm (6+4 weeks) and positive cardiac activity (Figure 1). Laboratory findings were hgb: 11,6 mg/dl and htc:36%. There was no acute abdomen findings. Due to missed abortion for the intrauterine pregnancy and the scar-located ectopic pregnancy, surgical evacuation was not planned as a first line treatment. The patient was given repetitive dose methotrexate (0,1mg/kg) with folinic acid (1 mg/kg).



Figure 1. Before methotrexate treatment

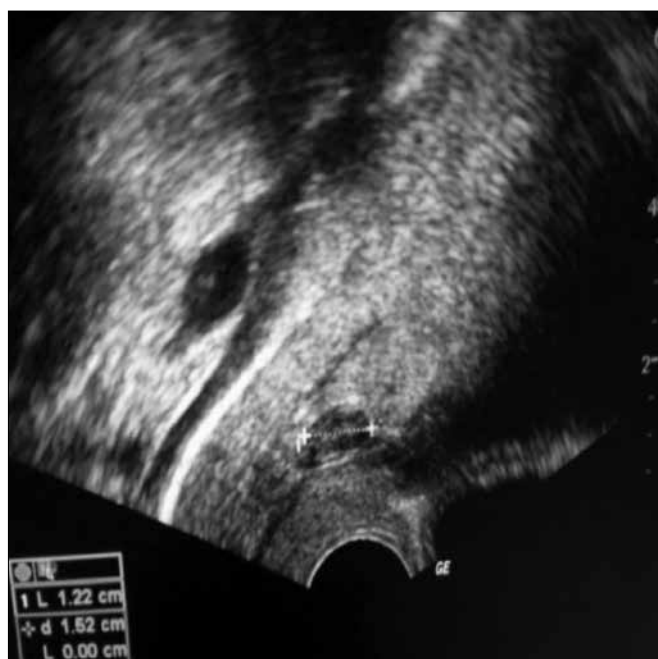


Figure 2. After vaginal aspiration

However, after the completion of the treatment, scar pregnancy still had positive fetal heart rate. Therefore, using a needle thorough vaginal route under ultrasound guidance, amniotic cavity was reached and amniotic fluid was aspirated followed by the injection of 1mg/kg methotrexate. Fetal cardiac activity was found to be negative with the ultrasound made on the same day of the procedure. During the following ten days, cesarean scar pregnancy got smaller and then lost (Figure 2). Later, the patient had dilatation and curettage (D/C) under general anesthesia in order to evacuate the intrauterine pregnancy, also. Patient was discharged after the D/C without any problem.

Conclusion: Although heterotopic pregnancies are rare, it's coexistence with cesarean scar pregnancy is even rarer. Therefore, during ultrasonography in early pregnancy, the demonstration of an intrauterine pregnancy should not be enough for the clinician and adnexal regions, cervical canal and cesarean scar regions should also be carefully evaluated. Unfortunately, the management of these cases still depend on the few case reports in the literature.

Keywords: Heterotopic pregnancy, cesarean scar pregnancy, ectopic pregnancy.

[OP-193]

Dermoid cyst of the round ligament misdiagnosed as inguinal hernia

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Introduction: Dermoid cysts are germ cell tumors composed of multiple cell types derived from one or more of the 3 germ layers. They are encountered commonly in the gonads (29%). By far, the most common gonadal location is the ovary, although they also occur somewhat less frequently in the testes. Here we aim to present a case of dermoid cyst located in the round ligament in a patient with an initial diagnosis of inguinal hernia, in order to point to this rare entity and remind as a choice in differential diagnosis.

Case Report: A 49-year old woman presented with a main complaint of menorrhagia every 20 days, lasting 10 days during which she had to use 4-5 baby diapers every day. Also soft, immobile swelling at right inguinal canal since childhood, which was not mobile by abdominal pressure. Pelvic examination revealed that uterus size was of 16-weeks of pregnancy. Transvaginal ultrasonography showed a mass lesion (12x9cm) with cystic and solid images at the uterine fundus. Computerized tomography reported that the right inguinal canal seemed wider with a cystic lesion of 66x47 mm diameter. An initial clinical diagnosis of myoma and right inguinal hernia was made and she underwent a laparotomy. At the operation, uterus was as large as 18-20 weeks of gestation and there was a 2 cm cyst at the left ovary while the right ovary seemed normal appropriately for the patient's age. Total abdominal hysterectomy and bilateral salpingo-oophorectomy (TAH+BSO) was performed. After

the TAH+BSO, exploration of right inguinal canal revealed a cystic mass about 8 cm diameter separated from the cord structures. Cyst was completely excised (Figure 1). When the cyst was opened, foul smelling,



Figure 1. Intraoperative appearance while opening the inguinal canal for exploration of the mass



Figure 2. Gross appearance of the excised mass

dark yellow muddy paste like material along with white hairs came out (Figure 2). The TAH+BSO material and inguinal cyst sent for histopathologic examination. Patient was discharged after 2 days of uneventful postoperative care. Histopathology of the inguinal canal mass excision was reported as 'dermoid cyst'.

Discussion: Hernia is the most common cause of inguinal swelling. Other common reasons include undescended testes, lipoma or hydrocele of spermatic cord. Some other rare causes include preperitoneal lipoma, haemorrhage into internal oblique muscle, round ligament angioma, pedunculated uterine fibromyoma, and thrombophlebitis. Dermoid cyst as a cause of inguinal swelling is quite rare. Search of medical databases using key words 'dermoid cyst and inguinal mass', revealed six case reports so far. Diagnosis is often mistaken clinically as irreducible inguinal hernia. The cyst may sometimes lead to compression of adjacent organs causing urinary retention and bowel obstruction. The possibility of malignant degeneration exists especially in women with dermoid cysts arising from round ligament. Tumoral markers like alpha-phenoprotein and beta-chorionic gonadotropin are helpful to monitor treatment and recurrence. In conclusion, occurrence of this in inguinal region is rare and imposes diagnostic challenge. Despite being a rare cause, proper suspicion should make dermoid cyst kept in mind and surgical excision is the treatment of choice.

Keywords: Dermoid cyst, inguinal, hernia

[OP-194]

An extremely rare case of vaginal agenesis, uterus unicornis, haematocolpos, mental retardation, bilateral tarsal syndactyly and camptodactyly; possible Fraser syndrome/amblypharon macrostomia syndrome, a case from Pristina, Kosovo

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Introduction: Vaginal agenesis is a rare entity, commonly associated with congenital malformations of different organ systems. Here we aim to report a case with vaginal agenesis, dilated urethra, uterine anomaly, disorders such as mental retardation and syndactyly. We dealt with this case at an official volunteer period in Pristina, Kosovo.

Case Report: A 23-year-old female presented to outpatient with the complaint of lower abdominal pain. She didn't have menarche so

far, her height was 140 cm, weight was 39 kg, was mentally retarded, seeking parent's help during daily life. Her hearing was impaired. At the physical examination, multiple congenital anomalies were detected such as microblepharon, bilateral deficient right ear helix, deviated nasal septum to right, high arched palate, camptodactyly at both hands and bilateral syndactyly of third and fourth tarsal bones. Complete vaginal agenesis with dilated urethral orifice was detected (Figures 1a,b). Pelvic ultrasonography showed 10x12.5 cm cystic lesion at the midline adjacent to another more translucent mass located at the lower left side which was 7x5 cm (Figure 2). She suffered continuous urinary incontinence. There was no family history of congenital anomalies. Tanner staging for breast was stage 3; pubic hair stage 2. After detailed counselling of the parents, she underwent a laparotomy. After midline incision, pelvis was explored, uterus was malformed and unicornuate with a rudimentary horn, haematocolpos was present at the unicorn. Ovaries were normal. There was double ureter at the right side. In consideration of her mental retardation and lack of expectation of her future reproductive ability, detailed discussion was made with the parents, and with their written consent, total hysterectomy was performed (Figure 2b). After the hysterectomy, urethral orifice was explored using 5-cm camera of diagnostic hysteroscopy. Both uterine openings were located at the posterior side of the orifice 1-1.5 cm. inside close to the inlet. When intraoperatively consulted to urologist, his advice was not to do any urological intervention at the current session and reevaluate the patient under elective circum-



Figure 1. a-c. a-b; right and left feet with syndactyly between 3 and 4 tarsals 1c; appearance of perineum; complete vaginal agenesis and dilated urethra resembling a normal vaginal orifice

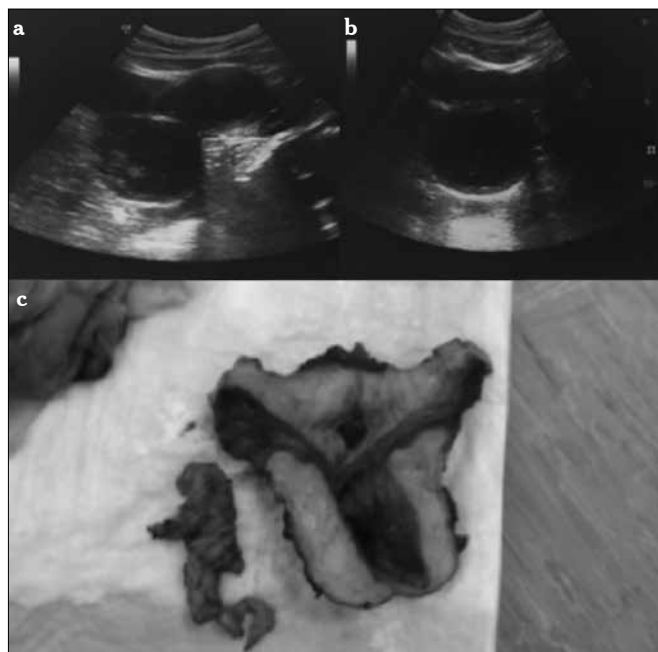


Figure 2. a-c. a and b; ultrasonographic appearance of the masses, 2c hysterectomy material

stances. The operation ended, patient was discharged after 2 days of uneventful postoperative care.

Discussion: This was a very demonstrative case regarding the association between genital malformations and other organ systems. Individually this case was very interesting showing many features of extremely rare syndromes such as Fraser Syndrome and ablepharon macrostomia syndrome (AMS). An intensive search including medical databases as well as genetic and rare disorders databases revealed these two disorders as the closest suspected entities.

AMS is an X-linked disorder, abnormal features include abnormal ears, fishlike mouth, absence of lanugo, redundant skin, vertical shortening of all eyelids, syndactyly or the flexed fingers (camptodactyly) and urogenital anomalies. Fraser syndrome is autosomal recessive, contains cryptophthalmia, nose and external ear anomalies, skeletal defects, syndactyly, renal agenesis, large clitoris and labia majora, mental retardation and vaginal atresia. It is hard to make the definitive diagnosis before the results of the genetic testing. Comprehensive thinking while dealing with patients with a genital anomalies may provide proper diagnosis of underlying genetical disorder which may play a key role to identify additional cases.

Keywords: Agenesis, unicornus, mental retardation, syndactyly

[OP-195]

Unsuccessful outcome of selective embolisation in a patient with haematoma after myomectomy

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Introduction: Uterine fibroids are the most common reproductive tract tumoral lesions and one of the most common organic causes of abnormal uterine bleeding. Uterine artery embolization is one of the fertility-sparing options of the nonsurgical treatment of fibroids. However there is limited or no data regarding the use of selective arterial embolization in the cases of hematoma formation after myomectomies. Here we report a case of hematoma formation after excision of multiple myomas, in which non surgical approach was attempted by embolizing the vasculature as the cause of permanent hematoma formation.

Case Report: A 38 years old patient, gravida 1 and parity 1 admitted to outpatient clinic with the complaint of menorrhagia and lower abdominal pain. Physical examination revealed that the uterine size was 14 weeks of pregnancy, without any pathology detected at the adnexial regions. Ultrasonography showed uterus was filled up with multiple fibroids of various sizes. She desired a myomectomy if possible in order to keep her uterus for future reproductive Objectives. After her informed consent taken, she underwent laparotomic myomectomy. The operation was uneventful, ended by excision of the 6 fibroids and moderate controlled bleeding. Two days after the operation she experienced vaginal bleeding and ultrasonography revealed a 8x9 cm mass inside the uterus reflecting a hematoma at the location of the largest excised myoma. Her bleeding continued for 1 week, the size of the hematoma remained almost the same. She underwent selective angiography for the uterine artery in order to visualize the bleeding site.

The angiography revealed a pack of chaotic vascularization and this pack was eliminated at the same session. After a week of follow-up at the clinic she was discharged after the vaginal bleeding no longer present. After 1 month at follow-up visit, ultrasonography showed the hematoma was at the same size with the beginning. After 3 months she admitted to the emergency department with abnormal heavily vaginal bleeding, and ultrasonography revealed that the dimensions of the hematoma were enlarged to 13x12 cm instead of shrinking. After detailed counselling, patient decided hysterectomy procedure as a definite solution and total abdominal hysterectomy was performed (Figure 2).



Figure 1. Angiographic appearance of chaotic vascularization at the site of myomectomy



Figure 2. Hysterectomy material; muddy appearance of previously accumulation of blood

Discussion: Minimal invasive procedures such as selective embolization have been showed to be effective in the hemorrhagies at the postpartum period or at the non surgical therapy of the fibroids. While searching the literature, there was no spesific case which presented a case that embolization was used to eliminate hematoma formaiton after myomectomy. These minimally invasive procedures may be appropriate treatment choice in the well-selected cases and patient should be well informed about the failure rates.

Keywords: Myomectomy, haematoma, selective embolization

[OP-196]

Two novel mutations in the FRAS1 gene in Fraser Syndrome: Two case reports

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Objective: We aimed in the present study to discuss the clinical and molecular findings of two cases with Fraser Syndrome in parallel with the literature and to present the literature with two novel mutations that had not been defined in FRAS1 gene.

Case 1: A 32-year-old patient (Gravida 6, Parity 5, Abortion 0 and Living Children 1) in the 31st week of her pregnancy in line with the date of her last menstrual period was transferred to our hospital from an external centre with the diagnosis of severe oligohydramnios and intrauterine growth retardation. The patient was taken into caesarean section with the indications of previous caesarean section and breech presentation following the onset of labour pain. One male newborn of 920 gr and 31 cm with an APGAR (Activity, Pulse, Grimace, Appearance, Respiration) score of ½ was delivered by caesarean section through breech presentation. The newborn passed away due to respiratory failure at the 30th post-natal minute. The post-mortem examination were observed bilateral cryptophthalmos, low hairline, depressed nasal root, nasal hypoplasia, low ears, conchal malformation, microstomia, narrow thorax, cutaneous-type syndactyly in left hand, and umbilical hernia (Figure 1A). The karyotype analysis resulted in 46,XY. The case was diagnosed with the Fraser Syndrome on the basis of clinical findings. Blood samples were collected from the parents after the birth for prospective gene mutation studies. DNA was obtained from blood samples by standard procedures. All 75 protein-encoding exons and splice sites of the FRAS1 gene were sequenced using next generation sequencing method on Illumina Miseq platform. Both results were reported a heterozygote premature stop codon mutation c.7777C>T (p.Q2593X) in exon 54 of FRAS1 gene (Figure 1).

Case 2: A 28-year-old patient (Gravida 7, Parity 6, Abortion 0 and Living children 2) in the 40th week of her pregnancy in line with the date of

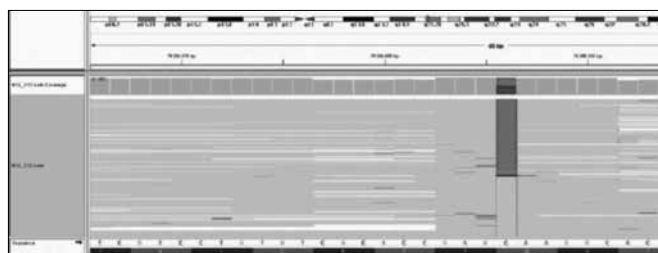


Figure 1. Result of the FRAS1 gene sequencing encompassing the c.7777C>T (exon 54). The single nucleotide substitution in the FRAS1 gene is observed in the middle column in sample. At the top of the figure, the location of the sequenced region was indicated according to the genome reference consortium. The original sequence, codons and corresponding amino acids are shown at the bottom of the figure

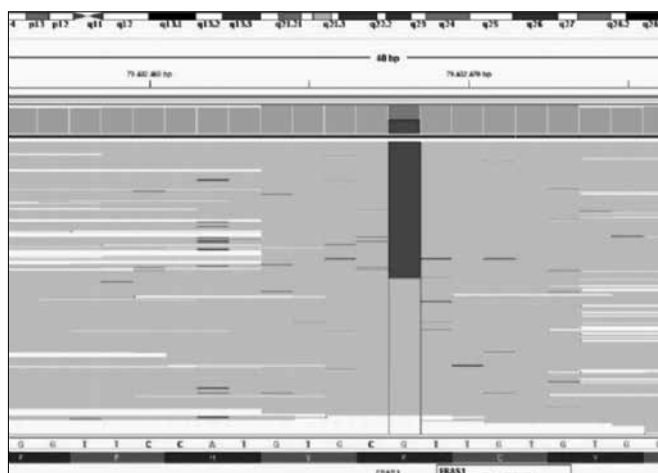


Figure 2. Result of the FRAS1 gene sequencing encompassing the c.9821G>C (exon 64). The single nucleotide substitution in the FRAS1 gene is observed in the middle column in sample. At the top of the figure, the location of the sequenced region was indicated according to the genome reference consortium. The original sequence, codons and corresponding amino acids are shown at the bottom of the figure

her last menstrual period applied to our hospital upon the onset of her labour pain. The patient had not been subject to antenatal follow-up before and her ultrasound could not observed the fetal heartbeat and presented severe oligohydramnios. The patient vaginally gave birth to a male newborn of 3700 gr and 51 cm with an Apgar score of 0/0. The post-natal post-mortem examination of the newborn were observed unilateral incomplete cryptophthalmos, low and dysmorphic ears, cleft lip and palate, cutaneous tip syndactyly in fingers and toes, bilateral cryptorchidism, and imperforate anus. The case was diagnosed with the Fraser Syndrome on the basis of clinical findings. Blood samples were collected from the parents for gene mutation studies. The results of the gene mutation study were reported as heterozygote missense mutation c.9821G>C (p.R3274P) in exon 64 of FRAS1 gene for both parents.

Conclusion: Fraser Syndrome is a rare autosomal recessive hereditary disease characterized by cryptophthalmos, cutaneous-type syndactyly, laryngeal and genitourinary system defects, and craniofacial dimorphisms. Mutations in FRAS1, FREM2 and GRIP1 genes causes this syndrome. We believe that the two cases we present here will contribute to the literature by extending the spectrum of the mutations causing the Fraser Syndrome.

Keywords: Cryptophthalmos, FRAS1 gene mutation, Fraser Syndrome, Syndactyly

[OP-197]

The effect of dexpanthenol on ischemia/reperfusion-induced ovarian injury: biochemical and histopathologic evaluation

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Objective: The aim of this study to evaluate the effect of dexpanthenol (Dxp) on the histopathology and biochemical parameters in experimentally induced ovarian ischemia/reperfusion injury in a rat model and to compare the effect of two different doses of dexpanthenol.

Material and Methods: A total of 40 female rats were randomly divided into 5 experimental groups; group 1: sham operation, group 2: 3-h ischemia, group 3,4 and 5: 3-h ischemia, 3-h reperfusion, group 4 and 5: 30 min before reperfusion, dexpanthenol was administered intraperitoneally at a dose of 300 mg/kg to group 4 and 500 mg/kg to group 5. Bilateral ovaries were removed for histopathologic and biochemical analysis. The ovarian ischemia/ reperfusion injury was evaluated by calculating total antioxidant status (TAS), total oxidant status (TOS) and oxidative stress index (OSI), tissue malondialdehyde (MDA), glutation peroxidase(GSH-Px) and catalase(CAT). Tissue damage of ovarian tissue was scored by histopathological examination.

Results: The TOS and OSI were higher in Groups 2 and 3 compared with Group 1 ($p<0,05$). TOS and OSI values were significantly lower in group 5 compared with group 2 and 3 ($p<0,05$) and TOS value was lower in group 4 compared with group 3 ($p<0,05$). In addition, OSI value was significantly lower in group 5 compared with group 4 ($p<0,05$). MDA levels in the control and dexpanthenol 500 mg/kg group were significantly lower than in groups 3 ($p<0,05$). Catalase and GSH-Px activities were significantly higher in the control group than in groups 2 and 3 ($p<0,05$). The catalase levels were higher in group 5 than in group 2 ($p=0,00$) and glutation peroxidase levels were higher in group 5 than in group 3 ($p=0,00$). Elevated tissue damage scores were determined in all groups when compared to the sham group, but treatment with Dxp of the rats with different doses before reperfusion ameliorated the tissue damage scores.

Conclusion: Our study results showed that Dxp reduced ovarian ischemia-reperfusion injury in experimental rat ovarian torsion model. Antioxidant and anti-inflammatory treatment modalities like dexpanthenol might be used to preserve ovarian ischemia-reperfusion injury.

Keywords: Ovarian torsion, Ischemia/reperfusion, oxidative stress, dexpanthenol

[OP-198]

Comparison of low molecular weight heparin and rapamycin in an experimental uterine horn adhesion model

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Objective: Previous many studies showed that low molecular weight heparin(LMWH) has preventive effect on the postoperative formation of adhesion. Also some study findings proved that immunosuppressive agent rapamycin has decreasing effect on the adhesion formation.

In this experimental study, we aimed to investigate the preventive effect of these agents separately and in combination.

Material and Methods: Our study included 40 Wistar-Albino rats weighing between 200-250 g. The control and three study groups were formed including 10 rats. In sterile condition we performed 3 cm midline incision on the rats abdomen under anesthesia. On the antimesenteric surface of both uterine horns 8-10 unipolar electrocoagulation were applied. Antimesenteric surface were sutured to abdominal side wall with 4.0 polydioxanone (PDS). Group 1 (n=10) Control group: No therapy was applied after surgery in this group and incision was closed according to surgical rules. Group 2 (n=10) LMWH group: In this group, after forming uterine adhesion model, Clexane 50 U/kg which is LMWH was applied intraperitoneally for 14 days. Group 3 (n=10) Rapamycin group: After forming experimental uterine horn adhesion model, 0.8 mg/kg rapamycin was applied orally with feeding tube for 14 days. Group 4 (n=10) Combined group: After formation of rat uterine adhesion model, 50U/kg LMWH was applied intraperitoneally for 14 days and this group also received 0.8mg/kg rapamycin orally with the feeding tube during the same duration. The animals were sacrificed by lethal dose pentobarbital 14 days after surgery and a midline laparotomy was carried out and abdominal cavity was inspected for the presence of adhesion.

Results: Macroscopic and microscopic evaluation of adhesion severity showed that no significant difference statistically between LMWH, Rapamycin and combined groups with the control group ($p>0.05$). The comparison of three study groups for the same results revealed that no significant difference was found statistically ($p>0.05$). When adhesion extension and total adhesion scores of the study groups compared with the control group, low scores were obtained statis-

Table 1. Total adhesion scores for each group

Group	Mean/(s.d.)	Min -Max (Median)
Control	4.15/(1.08)a	2.00-7.00 (4.00)
LMWH	3.50/(1.63)b	2.00-7.00 (3.00)
Rapamycin	2.85/(0.87)b	2.00-4.00 (3.00)
Combined	3.16/(1.68)b	2.00-8.00 (3.00)

a and b: Shows the differences between the groups $p = 0.002$

tically ($p < 0.05$). Three study groups when compared with each other for the same results we did not find statistical difference ($p > 0.05$). Total adhesion scores are presented in Table 1.

Conclusion: LMWH and rapamycin prevent total adhesion similarly, however, this effect is considerable on the extent of adhesion rather than the severity of adhesion. Combination of LMWH and rapamycin did not show synergistic effect on adhesion severity but adhesion extension and total adhesion scores of the study groups compared with the control group, low scores were obtained statistically. Consequently, we believe that the continuation of experimental and clinical studies of both agents with different adjuvants in combination, may be increase their adhesion prevention effect.

Keywords: Low molecular weight heparin, peritoneal adhesion, rapamycin

[OP-199]

Bevacizumab exposure in pregnant rats might provide a model to study human preeclampsia

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Objective: The aim of this study is to develop a mouse model preeclampsia by administering an angiogenesis inhibitor bevacizumab.

Material and Methods: Sixteen pregnant rats were randomly allocated to intraperitoneal injection of 10 mg/kg bevacizumab or 0.1 cc intraperitoneal serum physiologic on the 4th and 8th days of gestation. Blood pressure, body weight, and proteinuria were measured at both on day 0 (D0) and day 20 (D20). Blood samples were collected at D20 for analysis including vascular endothelial growth factor (VEGF) and soluble Fms-like tyrosine kinase 1 (sFlt-1) levels. On the same day, mice were euthanized; placentas and pups weighted, and angiogenesis markers as well as micro vessel density were evaluated by the immunohistochemical methods. Micro vessel density was determined by counting the number of CD31 and CD105 (Fig. 1A). Semi-quantitative evaluation of VEGF (Fig. 1B) and sFlt-1 (Fig. 1C) expressions was performed by measuring histological score. Glomerular histopathological changes (endothelial swelling (ES), capillary loop occlusion (CO) and protein droplets PD) were graded (Fig. 1D).

Results: VEGF was significantly lower in bevacizumab exposed pregnant rats than their controls ($p = 0.038$) (Table 1). In contrast, sFlt-1 concentration was found to be significantly higher in bevacizumab exposed pregnant rats when compared with the control group ($p = 0.015$). Dealing with biochemical parameters, there were no dif-

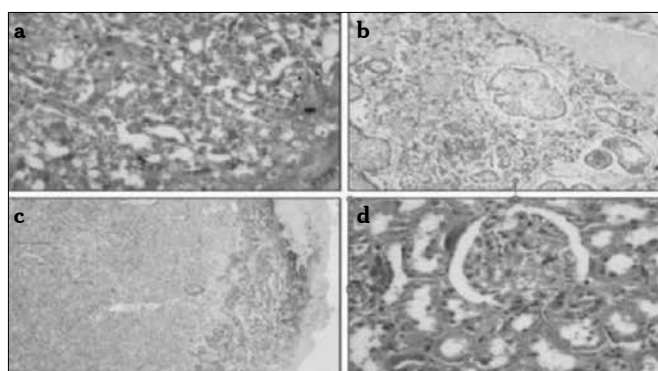


Figure 1. a-d. (a) CD105 immunostaining, 400 x magnification; (b) VEGF immunostaining, 100 x magnification; (c) sFlt-1 immunostaining, 40 x magnification; (d) Protein droplets, image of renal glomerular endotheliosis

ferences in AST, ALT, BUN, creatinine and proteinuria levels between the groups ($p > 0.05$). Although blood pressures on D0 were similar between bevacizumab exposed and non-exposed groups ($p > 0.05$), both systolic ($p = 0.050$) and diastolic ($p = 0.046$) blood pressures were found to be significantly higher in bevacizumab exposed pregnant rats than the control group. Regarding systolic and diastolic blood pressures, and proteinuria levels measured on D0 and D20, the Wilcoxon Signed Rank Test did not reveal a statistically significant difference on two occasions in the control group. Similarly, maternal blood pressures of bevacizumab treated pregnant rats were found to be comparable between D0 and D20. However, bevacizumab treated pregnant rats on D20 revealed a statistically significant increase in proteinuria when compared to D0 ($p = 0.026$) (Table 1). Maternal weight (D0 and D20) and weight gain were comparable between the bevacizumab treated and the control groups ($p > 0.05$) (Table 2). Similarly, there were no significant differences in the number of pups per litter and the mean fetal weight between the groups ($p > 0.05$). Immunohistochemical evaluation of placental sections revealed that micro vessel density was comparable between bevacizumab exposed pregnant rats and control group ($p > 0.05$). Moreover, glomerular endotheliosis scores that were evaluated histopathologically were found to be similar between the groups ($p > 0.05$). Although there was no significant difference in placental VEGF ($p > 0.05$), placental sFlt-1 expression was significantly higher in bevacizumab exposed pregnant rats than the controls ($p = 0.050$) (Table 2).

Conclusion: The promising results of this trial show that bevacizumab exposure in pregnant rats might provide a model to study human preeclampsia.

Keywords: Bevacizumab, preeclampsia model, rats

[OP-200]

Does vitamin D prevent ischemia-reperfusion injury of ovary on a rat model?

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Vitamin D is an antioxidant and the deficiency is associated with the increase in oxidative stress and the apoptosis process. It has anti-inflammatory, anti-fibrotic and anti-apoptotic actions in several tissues. Treatment with Vitamin D3 was shown to have protective effects on ischemia/reperfusion injury of lung, muscle and kidneys however its probable effects on ovary is unknown. From this point of view we aimed to investigate probable acute effects of Vitamin D on ischemia-reperfusion model in rat ovary. A group of 30 Wistar-Albino rats were divided into five groups. Group 1: sham group (n=6); underwent laparotomy only and the ovaries were removed. Group 2: ischemia group (n=6); 3-h ischemia followed by excision of the ovaries. Group 3: ischemia-reperfusion group (n=6); 3-h ischemia and 3-h reperfusion and the ovaries were removed. Group 4: Vitamin D-ischemia group (n=6); Vitamin D was administered 30 minutes prior to the 3-h of ischemia and the ovaries were excised at the end of ischemia. Group 5: Vitamin D-ischemia-reperfusion group (n=6); Vitamin D was administered 30 minutes prior to the 3-h of ischemia and 3-h reperfusion then the ovaries were removed at the end of reperfusion. The ovaries excised in each groups were also underwent to biochemical analysis. MDA (malondialdehyde), SOD (superoxide dismutase), NO (nitric oxide), TAS (total antioxidant score), TOS (total oxidant score) were analyzed as biochemical parameters. We determined a tendency to the decrease of MDA levels in Group 5 compared to the Group 3 in fact it was insignificant. In similar NO and TAS levels was also observed lower in Group 5 (Vitamin D-ischemia-reperfusion group) compared to the Group 3 (ischemia-reperfusion group). When we evaluated TOS value between Group 2 (ischemia group) and Group 4 (Vitamin D-ischemia group), Group 4 had low levels than group 2. However, there were no statistically differences between these groups according to the biochemical analysis.

Efficacy of Vitamin D on ischemia-reperfusion injury was evaluated in various studies such as myocardial injury, renal ischemia/reperfusion injury and hepatic ischemia/reperfusion injury. To the best of our knowledge, it is the first study that evaluate the effectiveness of Vitamin D on ovarian ischemia/reperfusion injury. As a result Vitamin D seems an effective molecule for protection of ischemia-reperfusion injury of ovary. We determined minimally improvement on ischemia/reperfusion injury of the ovary with Vitamin D administration but it is not statistically significant which might be related to the long elimination and action time of Vitamin D. Its effects and doses should be investigated in women with ovarian torsion by further studies.

Keywords: Vitamin D, ischemia, reperfusion, ovary

[OP-201]

Dose dependent protective effects of vardenafil on ischemia-reperfusion injury with biochemical and histopathologic evaluation in rat ovary

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Objective: The Objective of the study is to evaluate the effect of vardenafil on the histopathology and biochemical parameters in reducing damage in experimental ovarian ischemia and ischemia/reperfusion injury in a rat model and to compare the effect of two different doses of vardenafil.

Material and Methods: Forty-two rats with experimental ovarian torsion. Group-I: sham; Group-II: ovarian ischemia; Group-III: 2 hours of ischemia followed by a 2-hour reperfusion. Group-IV: two hours before the sham operation, rats received 1 mg/kg vardenafil; Group V and VI: A 2-hour period of ovarian ischemia was applied, in which rats were treated with intraperitoneal vardenafil 1 and 2 mg/kg dose, after 1.5 hours of ovarian ischemia. After 2 hours of reperfusion, the ovaries on the right side were removed for examination. The ovarian

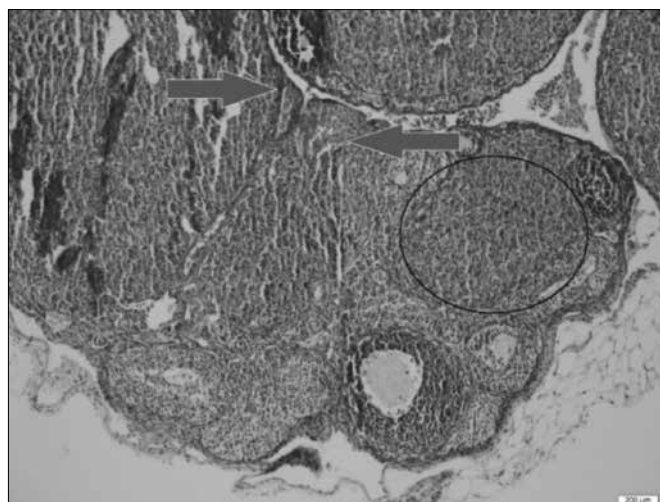


Figure 1. Group 5 (I/R + 1 mg/kg ip. vardenafil) minimal vascular congestion (purple arrows) and minimal hemorrhage (inside the black circle)

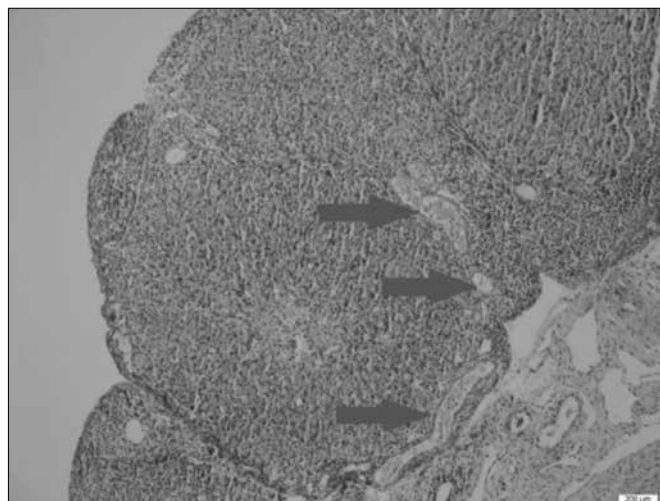


Figure 2. Group 6 (I/R + 2 mg/kg ip. vardenafil) minimal vascular congestion (purple arrows)

Table 1. Comparison of the biochemical results for groups

	Group 1 Mean±SD	Group 2 Mean±SD	Group 3 Mean±SD Group 4 Mean±SD Group 5 Mean±SD Group 6 Mean±SD	Group 4 Mean±SD	Group 5 Mean±SD	Group 6 Mean±SD
¹ TAS (mmol Trolox equivalent/L)	0.45±0.18	0.45±0.33	0.26±0.31	0.48±0.18	0.22±0.17	0.15±0.19
² TOS (μmol H ₂ O ₂ Equiv./L)	10.13±2.54	34.17±12.77	21.86±10.73	10.53±2.98	22.85±8.5	14.78±6.75
³ OSI (Arbitrary unit)	2.60±1.45	13.17±10.7	26.88±31.75	2.25±0.61	27.69±31.9	29.6±32.42
¹ TAS: Total Antioxidant Status; ² TOS: Total Oksidant Status; ³ OSI: Oxidative Stress Index Values demonstrated as Mean± Standart Deviation						

ischemia/reperfusion injury was evaluated by calculating total antioxidant status, total oxidant status and oxidative stress index; and histopathologic examination of all ovarian rat tissue.

Results: The histologic findings in vardenafil treatment groups were statistically significant decreased edema and follicle degeneration, with vascular congestion, hemorrhage and follicle degeneration being dose-dependent (Figure 1, 2). There were no statistically significant changes in the biochemical parameters (Table 1).

Conclusion: According to histopathological examination, low and high dose vardenafil is effective in attenuating ischemia-reperfusion induced ovary injury.

Keywords: Vardenafil, ovarian torsion, ischemia-reperfusion, rat model

[OP-202]

Investigation of effects of vitamin D and mannitol in rat ovary induced by experimental ischemia/reperfusion injury

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Objective: This study was designed to investigate the effects of vitamin D and mannitol in experimental rat ovarian torsion model.

Material and Methods: Forty female Wistar albino rats were randomly classified as group 1: (sham), group 2:(detorsion), group 3: (detorsion+mannitol), group 4: (detorsion+vitamin D) and group 5: (detorsion+mannitol+vitamin D) (for each group n=8). All groups were subjected to bilateral adnexal torsion for 2 h except for group 1. Bilateral adnexal detorsion was performed in all groups except for group 1. The groups 3 and 5 intraperitoneally received the injection of mannitol

in a dose of 0.3 mg/kg 30 min before detorsion. Also, the groups 4 and 5 orally received vitamin D in a dose of 500 IU/kg/day for two weeks before torsion. TOS, TAS, OSI and PCNA levels were analyzed.

Results: According to the histopathological analyses, ovarian tissue damage and follicle counting were evaluated. TOS, OSI and histopathologic scores values of ovarian tissue were significantly lower in group 5 than groups 2, 3 and 4 (p<0.05). PCNA level was significantly higher in group 5 than groups 2, 3 and 4 (p<0.05). A strong negative correlation was found between OSI and PCNA in groups 2, 3, 4 and 5 (r=-0.92, p=0.01; r=-0.98, p<0.0001; r=-0.98, p<0.0001 and r=-0.96, p=0.0002, respectively). Numbers of primordial follicles in group 5 (p<0.001) and primary follicles in group 4 (p<0.001) were significantly higher when compared to group 2.

Conclusion: Based on results of this study, it could be suggested that combination treatment of mannitol with vitamin D is more effective in reversing tissue damage induced by ischemia-reperfusion (I/R) injury in ovarian torsion model than administration of only an agent.

Keywords: Ovarian torsion, ischemia reperfusion injury, mannitol, vitamin D, pcna

[OP-203]

Investigation of the protective effects of amifostine against damage of hysterosalpingography on ovarian tissue: a rat model

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Objective: Amifostine is an antioxidant, cytoprotective and radioprotective agent. In this study we aimed to investigate the protective effects of amifostine against short and long term damages of hysterosalpingography (HSG) on ovarian tissue of rats.

Material and Methods: This prospective, single-blind study was conducted with 40 Wistar albino female rats. The rats were divided randomly into four groups as follows:

Grup 1 (control, n=10): Abdominal opening and closing.

Grup 2 (radiation, n=10): Abdominal opening and closing after X-ray application.

Grup 3 (HSG, n=10): abdominal opening and closing after 0.1 mL intra-hornual iohexol (Omnipaque® 350 mg/100 mL) and X-ray application.

Grup 4 (amifostine, n=10): Abdominal opening, 200 mg/kg amifostine intraperitoneal administration, 30 minutes after this procedure intrahornual 0.1 mL iohexol (Omnipaque® 350 mg/100 mL) and X-ray application and then abdominal closing.

Whole body radiation was applied three times with two minutes intervals, to all rats, in group 2, 3 and 4. Total radiation doses were 15-20 miliRad. For short term investigation, five rats were operated (oophorectomy) three hours after radiation and for long term investigation five rats were operated one month after radiation in each of groups. Histological, immunohistochemical and proliferative cell nucleus antigen (PCNA) analysis were done on one ovarian tissue and the remaining ovarian tissue were used for analysis of tissue malondialdehyde (MDA), total antioxidant level (TAL), total antioxidant capacity (TAC), nitric oxide (NO) and tumor necrosis factor-alpha (TNFα). Antimüllerian hormone (AMH) levels were studied with samples of intracardiac blood.

Results: All parameters of oxidative stress (MDA, TAL, NO) did not show significant difference among groups for short term; but for long term, significant increment was observed in radiation and HSG groups ($p<0.05$). In amifostine group, oxidative stress parameters were significantly low observed. There was no significant difference among groups for levels of AMH. While germinal epithelial degeneration and apoptosis were significantly increased in radiation and HSG groups; PCNA immunoreactivity was similar among all groups. And also, germinal epithelial degeneration and apoptosis were significantly low in amifostine group.

Conclusion: Application of amifostine is an effective method to protect ovarian tissue against oxidative damage of radiation and HSG.

Keywords: Amifostine, histerosalpingography, oxidative damage, ovary

[OP-204]

Effects of quercetin and Surgicel® on preventing adhesions after gynecological surgery: A rat uterine horn model

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Objective: To investigate the effects of quercetin and Surgicel® on preventing adhesions after gynecological surgery.

Material and Methods: A double-blind, randomized controlled experimental study was designed. Forty female Wistar Hannover rats were divided into five groups (control, sham operated, quercetin, Surgicel, and quercetin+Surgicel). After anesthesia induction, 1.5–2-cm injuries were made to each uterine horn by cauterization. The control group received no medications except those used for the surgical procedure. The sham group received laparotomy only. The quercetin group received 15 mg/kg quercetin in addition to undergoing the standard surgical procedure, and the injuries in the surgical group were covered with a single, 1-cm² layer of Surgicel. After placement, the Surgicel was moistened with two drops of sterile saline solution for adherence to the tubal surfaces. The quercetin+Surgicel group re-

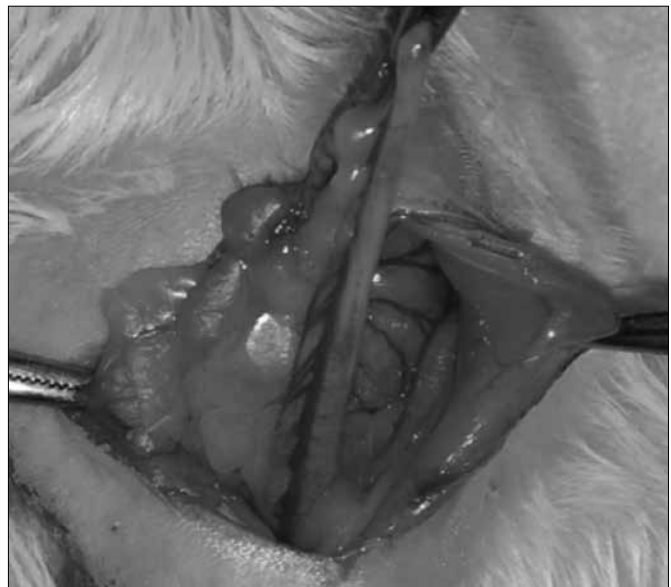


Figure 1. After cauterization white tissue discoloration on the peritoneal side of the rat tuba



Figure 2. Application of Surgicel on to the traumatized rat tuba

Table 1. Macroscopic Adhesion Score

group	sham	control	querc	surgicel	Surc+ querc
Number of uterine horns	16	14	16	16	16
Macroscopic adhesion score					
Extend	0 (0)	3.71±0.48 (3-4)	1 (1)	2.25±0.7 (1-3)	1.13±0.35 (1-2)
Severity	0 (0)	3.43±0.53 (3-4)	1.25±0.46 (1-2)	1.25±0.46 (1-2)	1 (1)
Degree	0 (0)	4 (4)	1.38±0.51 (1-2)	2.13±0.83 (1-3)	0.75±0.46 (0-1)
Total	0 (0)	11.14±0.69 (10-12)	3.63±0.51 (3-4)	5.5±0.53 (5-6)	2.8±0.64 (2-4)
Histopathological score					
Inflammation	0 (0)	2.71±0.48 (2-3)	1 (1)	2±0.53 (1-3)	1.38±0.51 (1-2)
Fibrosis	0 (0)	3 (3)	1 (1)	2±0.53 (1-3)	1.38±0.51 (1-2)

Table 2.

	Extend	Severity	Degree	Total	Inflammation	Fibrosis
Sham/control	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sham/querc	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sham/surgicel	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sham/surg+ querc	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Control/querc	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Control/surg	<0.001	<0.001	<0.001	<0.001	0.002	<0.001
Control/ surg+ querc	0.001 <0.	<0.001	<0.001	<0.001	<0.001	<0.001
Querc/surg	<0.001	0.1	0.06	<0.001	<0.001	<0.001
Querc/ surg+ querc	0.03	0.01	0.002	0.002	0.006	0.006
Surg/ surg+ querc	<0.001	0.04	<0.001	<0.001	0.006	0.006

ceived both 15 mg/kg quercetin and a single, 1-cm² layer of Surgicel. Adhesions were scored 14 days after the first surgical procedure.

Results: The extent, severity, degree, total adhesion, inflammation, and fibrosis scores of the control group were significantly higher than the those of the quercetin, Surgicel, and quercetin+Surgicel groups. There was no significant difference between the Surgicel and quercetin groups for degree, but all other parameters were significantly higher in the Surgicel group than in the quercetin group. The quercetin+Surgicel group had lower adhesion scores than did the quercetin group.

Conclusion: Quercetin, Surgicel, and quercetin+Surgicel treatment may be useful for preventing pelvic adhesions.

Keywords: Focal adhesions, inflammation, pelvic pain, quercetin, surgicel

[OP-205]

Effect of garlic oil on ovarian reserve and evaluation of serum antioxidant paramaters, a rat ovarian torsion model

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Objective: To investigate the effect of garlic oil on ovarian reserve and serum oxidative stress markers in rat ovarian torsion model.

Material and Methods: A double-blind, randomized controlled experimental study was designed in a university research hospital. 24 female Wistar Hannover rats were divided into three groups (sham operated, detorsion and detorsion+garlic oil group). 1) The sham operated group received no medications except those used for the only surgical procedure. 2) detorsion-only group received bilateral adnexal torsion (3-hour ischemia), and then after 3-hour torsion period, detorsion (reperfusion) was performed; and 3) detorsion-garlic oil group received 5 mg/kg garlic oil intraperitoneally 2 hours before the same surgery as the detorsion-only group. Independently from the surgeries, preoperative and postoperative 1-mL blood samples were taken from the right jugular vein of each rat.

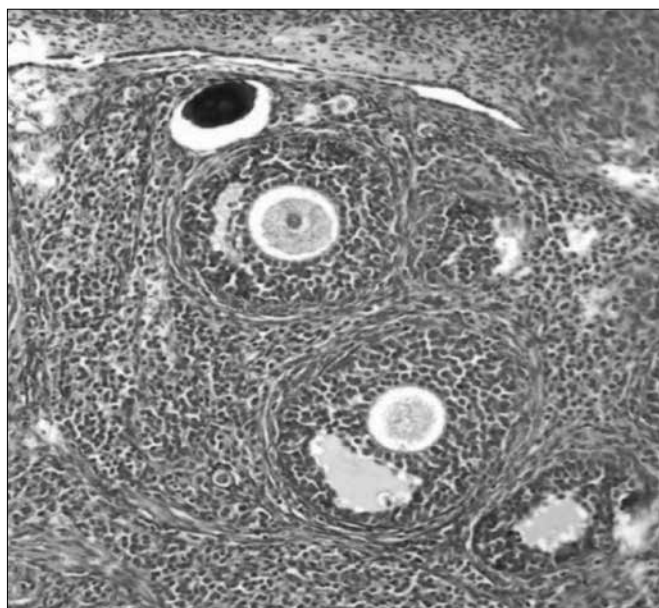


Figure 1. Small and Large Antral Follicules

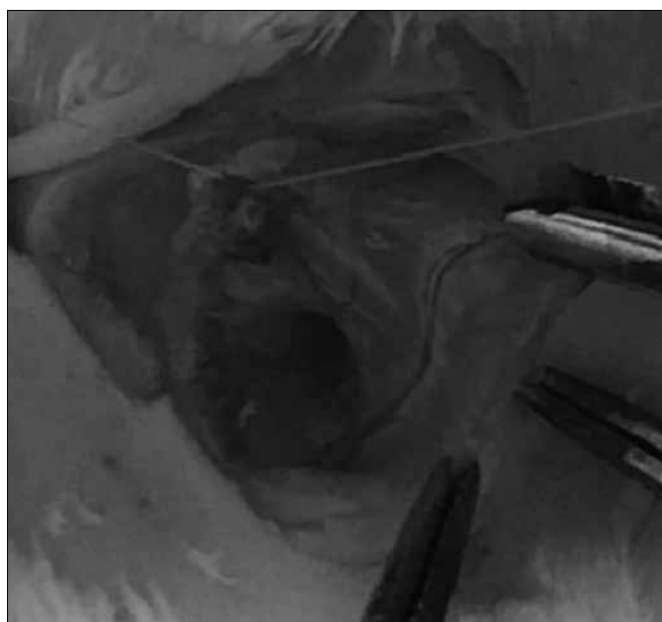


Figure 2. Torsion model

Table 1. Comparison of histopathological results of the study groups

	Control mean±SD (Range)	Detorsion mean±SD (Range)	Garlic+Detorsion mean±SD (Range)	P value
Follicle count				
Primordial	9.88±0.64 (9-11)	4.76±0.7 (4-6)	8.76±0.7 (8-10)	<0.001
Preantral	7.26±1.59 (4-9)	3.13±0.64 (2-4)	6.26±0.89 (5-7)	<0.001
Small antral	5±0.53 (4-6)	3.26±0.7 (2-4)	5.13±0.64 (4-6)	<0.001
Large antral	4.25±0.89 (3-6)	2±0.53 (1-3)	3±0.53 (2-4)	<0.001
Corpus luteum	8±0.76 (7-9)	10±0.53 (9-11)	8.76±0.7 (8-10)	0.001
Atretic	1±0.53 (0-2)	1.38±0.51 (1-2)	1.6±0.53 (1-2)	0.187
Damage score				
Degeneration	0.13±0.35 (0-1)	2.88±0.36 (2-3)	0.88±0.36 (0-1)	<0.001
Congestion	0 (0)	2.76±0.47 (2-3)	0.88±0.36 (0-1)	<0.001
Hemorrhage	1±0.53 (0-2)	2.76±0.47 (2-3)	1.76±0.47 (1-2)	<0.001
Inflammation	1±0.53 (0-2)	2.88±0.36 (2-3)	0.88±0.36 (0-1)	<0.001
Total damage	2.13±0.83 (1-4)	11.12±0.83 (10-12)	4.6±0.76 (3-5)	<0.001

There was statistically significant difference between study groups for primordial, preantral, small antral, large antral and corpus luteum counts between study groups. There was also statistically significant difference for damage scores such as degeneration, congestion, hemorrhage, inflammation and total damage scores between study groups (Table 1).

Table 2. Correlation analysis of the blood samples alterations and histopathological analysis of the study groups

	AMH alteration/r	TAS alteration/r	TOS alteration/r	OSI alteration/r	XO alteration/r
Primordial	-0.22	-0.49*	0.36	0.15	0.36
Preantral	-0.43*	-0.63**	0.19	0.36	0.1
Small antral	-0.25	-0.56**	0.09	0.36	-0.08
Large antral	-0.35	-0.73**	0.17	0.25	0.38
Corpus luteum	-0.21	0.5*	-0.31	-0.36	-0.14
Atretic	-0.29	0.15	-0.59**	-0.29	-0.34
Degeneration	0.38	0.58**	-0.24	-0.21	-0.26
Congestion	0.15	0.57**	-0.39	-0.26	-0.32
Hemorrhage	0.84	0.53**	-0.4	-0.15	-0.24
Inflammation	0.32	0.49*	-0.29	-0.33	0.1
Total damage	0.24	0.62**	-0.39	-0.25	-0.3

There was significant correlation between AMH alteration and postoperative preantral follicle count ($p<0.05$). There was statistically significant correlation between primordial, preantral, small antral, large antral, corpus luteum counts, degeneration, congestion, hemorrhage, inflammation, total damage scores and TAS alteration levels. However there was no significant correlation between OSI, XO alterations and histopathological results (Table 2). TAS: Total Antioxidant Status TOS: Total Oxidant Status XO: Xanthine oxidase OSI: Oxidative Stress Index

Results: There was significant correlation between AMH alteration and postoperative preantral follicle count ($p<0.05$). There was statistically significant correlation between primordial, preantral, small antral, large antral, corpus luteum counts, degeneration, congestion, hemorrhage, inflammation, total damage scores and TAS alteration levels. However there was no significant correlation between OSI, XO alterations and histopathological results

Conclusion: Garlic oil treatment after detorsion decreases the reperfusion injury by reducing the oxidative stress markers that could harm the ovarian reserve.

Keywords: Garlic oil, ovarian reserve, oxidative stress, AMH

[OP-206]

Dose dependent protective effect of Tempol in experimental ovarian ischemia-reperfusion injury

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Objective: The aim of this study is to investigate the antioxidant effects of two different dose of Tempol on ovarian ischemia-reperfusion injury in rats.

Study design: Forty female Wistar albino rats were randomly divided into five groups. Group1: sham, group 2: ischemia, group 3: ischemia-reperfusion, group 4: ischemia-reperfusion + Tempol 30 mg/kg i.p, group 5: ischemia-reperfusion + Tempol 50 mg/kg i.p. At the end of the experiment, samples were obtained from blood and over tissues for biochemical and histopathologic analysis.

Results: The MDA levels were significantly lower in group 4 ($p=0.000$) and group 5 ($p=0.000$) than in group 3. Catalase levels were significantly lower in the group 3 than group 4 ($p=0.000$) and group 5 ($p=0.000$). The glutation peroxidase levels were lower in group 3 than in group 4 ($p=0.000$) and in group 5 ($p=0.014$). OSI value was significantly higher in group 2 ($p=0.002$) and group 3 ($p=0.000$) compared with group 1. Edema was significantly increased in the group 3 ($p=0.001$) compared with group 1. Vascular congestion was significantly decreased in the group 5 compared with group 3 ($p=0.017$). The results of the histopathologic parameters were significantly decreased in the group 5 ($p=0.005$) when compared with group 3.

Conclusion: These results suggest that Tempol may be use to reduce the ovarian ischemia reperfusion injury.

Keywords: Ovarian ischemia-reperfusion, Tempol, oxidative stress

[OP-207]

Comparison of the effects of bilateral total salpingectomy versus bilateral proximal tubal occlusion on ovarian histopathology of rats: an experimental study

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Objective: Either salpingectomy or tubal occlusion are the surgical procedures applied for hydrosalpinx before in vitro fertilization. But it is yet not clear whether these interventions have any detrimental effect on ovarian tissue. In this study we compared the effects of bilateral total salpingectomy versus bilateral proximal tubal occlusion on ovarian tissue of rats.

Material and Methods: This study was conducted with 21 Wistar albino female rats during estrus phase. The rats were divided into three groups as follows: Group1 (n=7): Laparotomy and one month after laparotomy bilateral oophorectomy were performed. Group2 (n=7):

Table 1. The macroscopic cyst diameters of all groups (mm)

Rats	G2 right ovary	G2 left ovary	G3 right ovary	G3 left ovary	G1 right ovary	G1 left ovary
1	13	6	4	0	0	0
2	15	15	0	0	0	0
3	13	12	0	0	0	0
4	0	6	0	0	0	0
5	11	12	0	5	0	0
6	0	4	0	0	0	0
7	18	20	0	0	0	0

Firstly bilateral total salpingectomy (BTS) was performed by clamping and suturation and one month after BTS, bilateral oophorectomy was performed. Group3 (n=7): Firstly bilateral proximal tubal occlusion (BTO) was performed by bipolar cautery and one month after BTO, bilateral oophorectomy was performed. Before oophorectomy macroscopic evaluation of ovaries for determining cystic formation was done in all groups. All cystic formations bigger than 4mm were measured and recorded. The ovaries were fixed with 10% formalin and paraffin embedded. After staining with hematoxylin eosin, ovarian reserve was evaluated according to Mazaud et al. method. After TUNEL staining, apoptosis was evaluated by H score. In statistical assessment, the groups were compared with Kruskal-Wallis variance analysis and in binary comparison Mann-Whitney U test was used. P value <0.05 was accepted as statistically significant.

Results: In Group1, no cystic formation was observed. In group2, cystic formation was observed in all rats (100%). While bilateral cystic formations were occurred in five rats, unilateral cystic formations were occurred in two rats. The mean cyst diameters were 10mm and 10.7mm in right and left ovary respectively. In group 3, unilateral cystic formations were occurred only in two rats. And their diameters were 4 mm and 5 mm. Secondary follicle numbers were significantly low in group2 compared to that in group 1 and group3. Fibrosis and apoptosis scores of group2 were significantly higher than those of group1 and group3.

Conclusion: Our results showed that BTS is strongly inducing ovarian cyst formation and significantly decreasing ovarian reserve in rats compared to BTO.

Keywords: Ovarian histopathology, proximal tubal occlusion, rat, total salpingectomy

[OP-208]

Oocyte quality and follicle atresia are changed in a mouse model of fragile X primary ovarian insufficiency

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Objective: Recent work in our laboratories has led to the first time recognition that mitochondrial abnormalities are present in the granulosa cells and oocytes of heterozygous mouse carriers of the Fragile X Premutation (FXPM). It should be noted here that the study is a state of the art study in this field shedding light on ultrastructural details about this subject.

Material and Methods: We performed histomorphometric analysis of follicle growth and atresia of FXPM ovaries compared to wild-type (WT) controls. We stimulated animals with Pregnant mare's Serum Gonadotrophin (PMSG), followed by human chorionic gonadotropin (hCG) 48 hours later, and eggs were collected from oviducts 12 hours post-hCG.

Results: Counting the mitotic and pyknotic (dying) nuclei in the granulosa cells of primary and small preantral follicles revealed a significant difference in the mutants. The standard criteria for primary follicle atresia is one pyknotic nucleus per central follicle cross-section; for small preantral follicles, three per central cross-section. While In each follicle class, pyknotic nuclei were elevated in FXPM compared to wild-type, 90% of FXPM follicles exceeded this threshold. Because FXPM ovaries contain approximately normal numbers of follicles of all classes, this means that pyknotic nuclei are elevated in follicles that are growing (and not actually atretic). This effect of FXPM upon follicle growth is consistent with the prior finding that FXPM ovulatory follicles contain fewer granulosa cells than WT. Finally, our data on mitochondrial dysfunction in growing FXPM follicles led us to hypothesize that the response to gonadotrophic stimulation might be altered in FXPM animals. Mean numbers of ovulated intact and degenerate eggs were significantly higher in heterozygous FXPM animals than in WT controls.

Conclusion: These unique data suggest that while mitochondrial dysfunction favors follicle under-growth under physiological conditions, that stimulation can overcome the compromised growth in our mouse model. Even so, FXPM animals still produce more than double the number of degenerate eggs as seen in WT controls under the same conditions. Overall, these data increase our understanding of the impact of FXPM upon follicle development and the production of mature, fertilization-competent eggs in the context of gonadotrophic stimulation.

Keywords: Oocyte quality, follicle atresia, fragile x

[OP-209]

Effects of endocannabinoids on the isolated rabbit myometrium: An experimental invitro study

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Objective: It was shown that cannabinoids act on uterine smooth muscle "myometrium" contractility. However, the role and effect of the endocan-

nabinoid system in myometrial function are still controversial. The aim of this study is to evaluate the effects of endocannabinoids on myometrial contractility and to investigate through which cannabinoid receptors these effects are created in isolated rabbit myometrium.

Material and Methods: Myometrial strips (3x15 mm longitudinal) obtained from albino female rabbits (2.5-3 kg adult rabbits; n=20) were mounted in organ baths containing modified Krebs solution and were tested for changes in isometric tension. Electrical field stimulation (EFS) parameters were selected as 60 V with 1 ms duration in 10-s trains at 8-16 Hz frequencies at 2-min intervals to obtain isometric contractions. Then, anandamide (endogenous cannabinoid agonist; 10⁻⁷ – 3x10⁻⁵ M; n=7), WIN 55,212-2 (cannabinoid receptor agonist; 10⁻⁸ – 3x10⁻⁵ M; n=6), ACEA (selective CB1 agonist; 10⁻⁷ – 3x10⁻⁵ M; n=7), JWH015 (selective CB2 agonist; 10⁻⁸ – 3x10⁻⁵ M; n=6) were separately administered on EFS-mediated myometrial contractions. Additionally, the drugs mentioned above were evaluated on EFS-mediated contractions in the presence of indomethacin (10⁻⁵ M; n=7, n=4, n=4). To explore the contributions of the receptors, the effects of these drugs were appraised in the presence of AM 251 (CB1 receptor antagonist; 10⁻⁶ M; n=5, n=5, n=4), and AM 630 (CB2 receptor antagonist; 10⁻⁶ M; n=5, n=5, n=7). The direct effects of these drugs on myometrial smooth muscle were conducted in carbachol (cholinergic agonist)-induced contracted myometrial strips.

Results: Anandamide, WIN 55,212-2, ACEA and JWH015 produced a concentration-dependent reduction on EFS-evoked contractions (p<0.05). The inhibitor effects of anandamide, WIN 55,212-2, JWH015 and ACEA did not change in the presence of AM 251 and AM 630 in separately and together as well (p>0.05). The inhibitor effects of anandamide and WIN 55,212-2 increased significantly in the presence of indomethacin (p<0.05). There were no relaxant effects of all these drugs on the tissues contracted with carbachol (p>0.05).

Conclusion: Endocannabinoids exerted an inhibitory effect on EFS-evoked myometrial isometric contractions and they probably exhibited this effect via presynaptic interaction. This inhibitory effect of endocannabinoids suggests it may play a physiologic role in regulation of myometrial activity and further studies to evaluate the signaling pathways involved may help to define this role.

Keywords: Cannabinoid receptors, electrical field stimulation, endocannabinoids, rabbit myometrium

[OP-210]

The effects of Etanercept and Cabergoline on endometriotic implant, uterus and over in rat endometriosis model

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Objective: Endometriosis is defined as the endometrium tissue to unconventionally exist and function out of the uterus. In this study, we evaluated the effects of Etanercept, Cabergoline and Etanercept + Cabergoline treatments on endometrial implants, endometrium and ovaries by using the rat endometriosis model.

Material and Methods: In this study, 12 to 16 weeks old female Wistar Albino rats were examined in 5 groups: group 1 (n:10):Control; group 2 (n:9):Sham; group 3 (n:9): Cabergoline(C); group 4 (n:10):Etanercept (E); group 5 (n:10):Etanercept + Cabergoline(E+C). Firstly, laparotomy was performed to create endometriotic implant. Four weeks after the endometrial implants were created, status of the implants and serum AMH (Anti Mullerian Hormone) levels were assessed during the second operation. Following two weeks of treatment process, the third operation was performed; status of the implants and serum AMH levels were reassessed; biopsies were performed from the implants, ovaries and uteri. TNF- α (Tumor Necrosis Factor Alpha) and VEGF (Vascular Endothelial Growth Factor) levels in endometrial implants, ovarian and endometrial biopsies, CD146/ PDGFR β (endometrial stem cell) levels in endometrium and implant tissue and DDX-4 (ovarian stem cell), levels in ovarian tissue were evaluated by immunohistochemical (IHC) staining. CD2, CD3, CD4, CD5, CD8a, CD25 and CD45 protein levels were searched by Flow cytometry.

Results: Endometriosis model was successfully created in all the rats. Implant volumes were decreased more in group 4 and group 5 than group 3. Histopathological scoring was decreased the most in group 5 ($p<0.05$). Antral follicle count in group 4 ($p<0.05$) and AMH levels in group 5 ($p<0.05$) had been found to be more than other groups. AMH levels during third operation were decreased compared to second operation AMH levels in Sham group ($p>0.05$) and Sham group showed less antral follicle count compared to other groups. TNF- α IHC staining of endometrium and ovarian tissues in group 4 and 5 were decreased in intensity ($p<0.05$). TNF- α and VEGF IHC staining of implants in all groups were decreased in intensity, except Sham group ($p<0.05$). CD146/PDGFR β IHC staining of implants in Sham group were found to be more intense compared to other groups ($p<0.05$). Flow cytometric analysis showed that the increase in CD5 (Matur T cell indicator) and CD25 (Regulatory T cell indicator) in group 5.

Conclusion: Etanercept and Etanercept+Cabergoline treatments were found to be effective in rat model of endometrial implants, without any negative impact on ovarian reserves. E+ C issued, along with an increase in Treg function was observed. This suggests that the protective effect of Treg cells against the possibility of autoimmune events to genital organs. Sham group showed less antral follicle count compared to other groups. TNF- α , VEGF and CD146/PDGFR β decrease in implants were determined to be proportional to the decrease in implant volumes.

This study was financially supported by Kocaeli University Scientific Research Project

Keywords: Endometriosis, cabergoline, etanercept, stem cell, rat model

[OP-211]

Detrimental effect of cystectomy on ovarian reserve: endometrioma vs. other types of ovarian cysts, time to reconsider surgery for endometriomas

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Objective: We aimed to assess the predictors of unintended ovarian tissue removal during endometrioma or other types of ovarian cyst excision.

Material and Methods: Totally 100 women diagnosed to have endometrioma (n=50) or other types (n=50) of ovarian cysts underwent laparoscopic surgery. In all cases cystectomy was performed and age of patient, cyst diameter, cauterization, histopathologically confirmed fibrosis, inflammation, number of removed follicles with the developing stage of follicles were all recorded.

Results: Comparison of groups in terms of age, cyst diameter, number of removed total follicles, primordial follicles, primary follicles, secondary and the graffian follicles indicated significant differences with regard to number of removed total follicles, primordial follicles, primary follicles, secondary and the graffian follicles ($p<0.05$). In spearman correlation analyses number of follicles removed was significantly correlated with the diameter, inflammation, fibrosis, hemorrhagia, cauterization, cyst type. Groups were also compared in terms of degree of inflammation, fibrosis, hemorrhagia and cauterization requirement which were found to be significantly higher in endometrioma group.

Conclusion: Our data showed that cyst diameter and the type of cyst were significant confounders for the number of unintended follicle removal during cystectomy, however contrary to the general expectations, it seems that cyst other than endometriomas lead to higher number of unintended follicle removal during cystectomy.

Keywords: Endometrioma, ovarian reserve, laparoscopy, cystectomy

[OP-212]

Risk of occult uterus malignomas while using power morcellation

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Objective: Due to the development of MIC electromechanical morcellation (EMM) became a routine technic. Despite the important advantages of morcellation it may be associated with dissemination of uterine tissue throughout the peritoneal cavity and spread of an occult malignoma, which can result in cancer upstaging. Our aim is to estimate the frequency of the appearance of unexpected malignomas in morcellation and its clinical impacts in a patient cohort in our department.

Material and Methods: This retrospective study included patients treated from 2008-2015. We identified women who underwent laparoscopically or robotically myomectomy or hysterectomy because of symptomatic myomas and use of EMM.

Results: We analyzed 421 patients who had LSH (50.2%), TLH (18.1%) or myomectomy (31.7%). Unexpected malignancy was detected in 3 of 421 patients, which represents 0.71%. In all three cases the malignancy was proved to be sarcoma. We treated the patients with a re-operation for completion of staging. Up to now no intrabdominal

recurrence appeared (follow up 22,35 respectively 60 months).

Conclusion: There is an inherent risk of spread out of occult malignoma in EMM. In clinical management detailed patients' information about risk of EMM and alternatives are mandatory. Risk factors for presence of occult malignancies have to be considered. In high-risk patients, EMM should be avoided. In future morcellation bags should be used routinely. The outcome in case of morcellated malignomas keeps unclear.

Keywords: Risk of power morcellation, uterus malignomas, spread of occult malignoma, MIC myomectomy or hysterectomy, morcellation bags

[OP-213]

The review of our office hysteroscopy experiences in perspective "see and treat" concept

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Objective: Office hysteroscopy is a minimal invasive equipment which particularly used for diagnosis and treatment of abnormal uterine bleeding (AUB), functional and anatomic evaluation of uterine anomalies and evaluation of sub fertile patients. Our aim was to review of our office hysteroscopy experiences in perspective "see and treat" concept for five years period.

Material and Methods: This retrospective data analysis was conducted in a university hospital between August 2011 and February 2016. We performed office hysteroscopy without speculum and tenaculum after vaginoscopy under sedation in 144 patients with various indications in the age range 19-77. Our office hysteroscopy has 3.6 mm outer sheath with working channel(Karl Storz, Tuttingen, Germany). 74 patients for AUB, 20 patients for lost Intra-uterine device(IUD)s, 32 patients for subfertility, 12 patients for recurrent pregnancy loss(RPL) and 6 patients for uterine synechia were included in this data analysis. In case of cavitory pathologies, they were operated as possible with scissors, forceps and bipolar hook. Data were extracted from medical records and analyzed according to its indications.

Results: Endometrial polyp was the most frequent pathology of patients with subfertility following AUB. The most common cavitory anomaly was uterine septum. Cavitory pathologies were treated 100% in the lost IUDs group, 87.5% in AUB, 88.9% in subfertile women, 100% in uterine synechia, and 100% in RPL. In four patients(2.8%), operative

Table 1. Distribution of pathologies and successfully treatment ratio according to main indications of office hysteroscopy

Main indications	Visible pathologies (n, %)	Polip (n, %)	Successfully management ratio (n, %)
AUB (n=74)	48 (64.8%)	19 (25.7%)	42 (87.5%)
Subfertility (n=32)	18 (56.2%)	10 (31.2%)	16 (88.9%)
Lost-IUDs (n=20)	6 (30%)	4 (20%)	6 (100%)
RPL (n=12)	5 (41.7%)	3 (25%)	5 (100%)
Uterine synechiae (n=6)	6 (100%)	-	6 (100%)

hysteroscopy was needed to treat some pathologies such as submucous fibroid larger than 2 cm and huge endometrial polip. Office hysteroscopy was also successfully performed in six virgin women without injury to hymen. Hysteroscopy was performed to 44 patients for subfertility and RPL. Of 44 patients who had hysteroscopy, 22 patients had a pregnancy after operations and 20 had a live babies to home.

Conclusion: Office hysteroscopy seemed to effective in both diagnosis and treatment of AUB causes, subfertility and RPL. It should be considered as the first choice method for the evaluation of uterine cavity.

Keywords: Abnormal uterine bleeding, office hysteroscopy, subfertility, treatment

[OP-214]

Neuraltherapy for treatment of endometriosis

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Endometriosis is a chronic inflammatory disease. Although the exact pathophysiology of the disease is unknown, one of the possible causes is believed to be a blockage in the sympathetic nervous system. Several studies reported an induction of plasticity in cerebral cortex and pain pathways and a change in white-grey matter ratios in central pain center. One of the best indicators of this is amplifications observed in neurons. Cytokines and inflammatory markers, which are secreted upon inflammatory process triggered by a blockage in the sympathetic nervous system, as well as tissue deformation and organ perfusion, contribute to formation of both disease and pain. More specifically, these increase levels of dyspareunia, dysmenorrhea and pelvic pain in the patients. Moreover, a blockage in sympathetic nervous system affects the hypothalamic pituitary adrenal axis and leads to its deregulation. Consequent secretion of stress factors increase levels of cortisol, which possess an analgesic effect. While the therapy we apply for treatment of endometriosis includes regulation of sympathetic nervous system affecting the hormonal axis, neural therapy is a regulation treatment by local anesthetics (procaine-lidocaine).

Objective: Induced endometriosis, chronic pelvic pain and the relief of pain associated with other symptoms indicate the effectiveness of neuraltherapy

Material and Methods: Neuraltherapy to patients who were diagnosed endometriosis and pain associated symptoms was applied.

Clinical findings: In our study, we included 50 volunteer endometriosis patients, whom we followed for one year. We have obtained significant results based on the use of visual analog scale (VAS). Although there were no significant changes in the sizes of the endometria of the patients, the complaints of the patients, such as dyspareunia, dysmenorrhea and pelvic pain were completely declined at all stages. Following the fourth injection, the complaints of patients were dramatically reduced and upon application of seventh- and eighth- injections, complete recovery was achieved. Procaine is a short-term local anesthetic which also exerts anti-inflammatory, analgesic, anti-bacterial, anti-tumoral, neuroprotective and anti-thrombotic effects. If the cause of endometriosis is a hormonal dysfunction Hormonal therapy, which will be held axle (pituitary, celiac ganglion, thyroid, uterovaginal plexus) is the first step of treatment. Here In order to increase

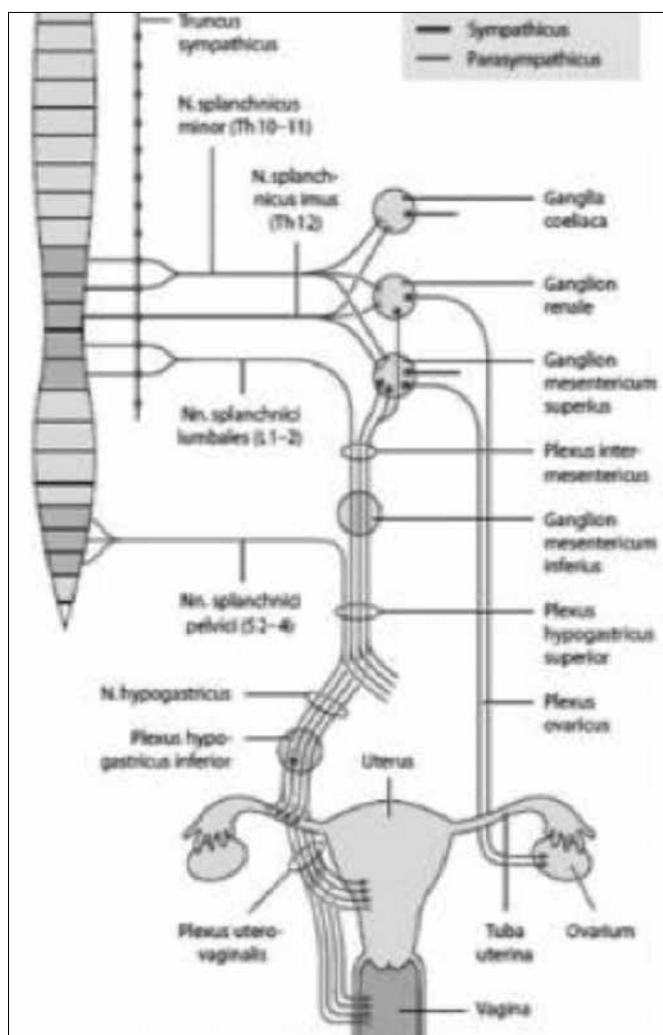


Figure 1. Innervation of the uterus

tissue perfusion and innervation of the pelvic region of all to regulate. with local and segmental treatment scarring in the pelvis in all possible inclusion in the treatment of tissues in the same area again and especially perfusion innervation for it is important.

Results: The cure was achieved in 36 stages, especially 1-2 endometriosis patients, it was observed that 14 patients with stage 3-4 on the pain significantly reduced. Due to pain in neurons with local anesthetics of eliminating the plasticity and sympathetic blockage is prevented from triggering the inflammatory process Stimulation of sympathetic nervous system has an anti-inflammatory effect in the body. Tissue perfusion is restored and persistence of microcirculation is ensured. Thus, pathophysiological mechanisms leading to endometriosis are removed.

Keywords: Current treatment for endometriosis, local anesthetics, neuraltherapy

[OP-215]

A comparison of skin elevation and fascial elevation in veress needle closed entry method

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Objective: To compare skin elevation and fascial elevation techniques which were used to elevate the anterior abdominal wall at the stage of Veress needle (VN) entry.

Material and Methods: In this prospective randomised clinical study, a total of 67 patients were recruited into 2 groups based on the technique used for VN entry during laparoscopy. In Group 1 (n=33), the skin was held and elevated by a towel clip on each para-incisional area. In Group 2 (n=34), the dissection was made as far as the rectus muscle fascia which was then held and elevated with Kocher forceps. The 2 groups were compared regarding the operative outcomes.

Results: The skin to fascia distance was determined as 48.8 mm in Group 1 and 8.2 mm in Group 2 (p=0.001). The time which elapsed until intraperitoneal entry of the VN in Groups 1 and 2 was 112 and 159 seconds respectively (p=0.01). The mean number of attempts to place the VN intraperitoneally was 1.9 and 1.2 in Groups 1 and 2 respectively (p=0.001). The 2 groups were statistically similar regarding the complications.

Conclusion: Compared to skin elevation, fascial elevation during the VN entry resulted in a decrease in the number of attempts to place the VN intraperitoneally while increasing the time until the intraperitoneal entry of the VN. As a hybrid of the open entry and VN closed entry techniques, combining the advantages of both, the use of this new technique can be recommended in routine gynecological laparoscopic procedures.

Keywords: Fascial elevation, laparoscopy, veress needle entry

[OP-218]

Isolated tubal torsion: Successful preoperative diagnosis with ultrasound and management with laparoscopy of four cases

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Introduction: Isolated tubal torsion is a very rare entity which reported as 1 in 1.5 million women. Because of non-specific clinical findings like lower abdominal pain, nausea, vomiting and fever it is a challenging preoperative differential diagnosis and should be in mind while approaching to the patient with abdominal pain. This report presents four cases of isolated tubal torsion and their successful preoperative diagnosis with ultrasound imaging and management with laparoscopic approach at a tertiary health center within 2 years.

Case Reports: Four patients with lower abdominal pain at different intensities diagnosed as tubal torsion with ultrasound imaging. All of the

diagnoses were confirmed with the laparoscopy, but the coexisting risk factors were misdiagnosed at Case 1 and 2 as listed at Table 1. Three of four patients were managed with salpingectomy and detorsion was carried out only at one patient which had further fertility will. None of the patients had postoperative complications and all of them were departed at first 48 hours.

Discussion: The potential risk factors for isolated tubal torsion are tubal pathologies like hydrosalpinx, paratubal cysts or ovarian masses and altered tubal function. But a normal tubal appearance was found mostly at isolated tubal torsion cases. One of four cases had a normal tubal structure, two had paratubal cysts and one had hydrosalpinx which consisting with the literature.

The sonographic features of tubal torsion may vary widely. Preoperative suspicion may rise with an image of elongated, convoluted cystic mass, tapering as it nears the uterine cornua. Increased resistance index due to decreased blood flow determined by Doppler ultrasound may also strengthen the suspicion of torsion. But abnormal Doppler findings is not a necessity for the diagnosis of torsion. Identifying a normal ipsilateral ovary may strongly suggest the tubal torsion. Also torsion itself may be seen as “whirlpool sign” which is the image of tissue turning around itself as shown in Figure 1. This sign should be seen definitely to diagnose patient as torsion and is enough for the diagnosis. There may be also hydrosalpinx image on the distal side of torsion and may be diffuse with the elongation of torsion duration. With use of these criteria and a cautious ultrasound examination performed by an experienced practitioner isolated tubal torsion may be predicted with a high sensitivity as in



Figure 1. Intraoperative view of the torsion



Figure 2. Ultrasound Image

*Whirlpool sign **Hydrosalpinx at the distal side of tubal torsion #Ovarian tissue

Table 1. Summary of the four cases

	Age	Preoperative Diagnosis	Surgery	Postoperative Pathology
Case 1	38	Tubal torsion + Hydrosalpinx	Laparoscopic Detorsion + Paratubal Cyst Excision	Benign Serous Cyst
Case 2	49	Tubal torsion + Paratubal cyst	Laparoscopic Salpingectomy	Hydrosalpinx
Case 3	30	Tubal torsion	Laparoscopic Salpingectomy	Dilated fallopian tube
Case 4	32	Tubal torsion + Paratubal Cyst	Laparoscopic Salpingectomy	Not resulted yet
Preoperative diagnosis, laparoscopic interventions and postoperative pathologic results of the patients				

that report. The importance of correct diagnosis is to make surgery as soon as possible to preserve the adequate circulation as with ovarian torsion.

The primary approach to the tubal and ovarian torsions should be laparoscopy and mentioned as reference standart. With advancing accessibility to laparoscopy torsions are mostly treated with that approach. We prefer laparoscopic approach at both ovarian and tubal torsions as in these 4 cases which were successfully managed with laparoscopy. In conclusion tubal torsion is an emergency state and a true preoperative diagnosis should be acquired immediately. Due to that fact ultrasound criteria for a tubal torsion diagnosis should be evaluated carefully by a experienced practitioner and laparoscopy should be the primary choice of treatment.

Keywords: Isolated tubal torsion, ultrasound, laparoscopy

[OP-219]

Laparoscopic sacrocolpopexy: a single center experience of two years

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Objective: Despite the fact that it is not a life threatening condition, vaginal cuff prolapse appears as a clinical entity that affects daily activities and impairs life quality in elderly women. Vaginal cuff prolapse is treated with sacrocolpopexy which aims to fixate the anterior and posterior vaginal walls on the sacral promontorium by means of synthetic materials that would act as a bridge. The high success rates of this surgical technique has led to the adoption of laparoscopic approach in its application. Currently, laparoscopic sacrocolpopexy is addressed as a very efficient and reliable method for the treatment of vaginal cuff prolapse. The present study aims to evaluate the two-year-long experience of a tertiary health center

Material and Methods: This is a retrospective review of 8 patients who underwent laparoscopic sacrocolpopexy due to vaginal cuff prolapse between January 2014 and December 2015. The urogenital characteristics of each patient were assessed by vaginal examination and

pelvic organ prolapse quantification system. Moreover, stress test was done after the manual correction of vaginal cuff prolapse. A polypropylene mesh was tailored in the shape of an inverse Y letter before surgery. Data related with operation time, hospital stay, intraoperative blood loss and complications were obtained from medical files. All women were evaluated six months after surgery and they were asked to complete a questionnaire about their satisfaction.

Results: Laparoscopic sacrocolpopexy was completed successfully in each patient. The mean operative time was 135 minutes (range: 120-180 minutes) whereas the mean duration of urethral catheterization was 2 days (range: 1-3 days) and the mean duration of hospital stay was 3 days (range: 2-4 days). No adverse effects related with the use of polypropylene mesh occurred in none of the patients during the early and late postoperative periods. There was no recurrence of pelvic organ prolapse in seven patients (87.5%) while second degree cystocele was noted in the remaining patient (12.5%). As the cystocele was asymptomatic, no treatment was planned. One of the reviewed patients (12.5%) had stress incontinence and another patient (12.5%) had mixed incontinence. Four patients were sexually active and only one of them complained about dyspareunia. The analysis of the questionnaires revealed that all patients were satisfactory about their surgical treatment.

Conclusion: Laparoscopic sacrocolpopexy has become a popular treatment method for vaginal cuff prolapse as it is a minimally invasive technique which allows detailed visualization of pelvic anatomy, provides easy access to all pelvic compartments, and facilitates the installation of vesicovaginal and rectovaginal meshes. Laparoscopic approach helps to avoid many disadvantages of laparotomy including longer hospitalization, relatively late ambulation and complications related with abdominal incision. However, technical difficulties and the requirement for personal skillfulness result in a steep training curve which may limit its use. The findings of the present study indicate that laparoscopic sacrocolpopexy is a feasible method of treatment for vaginal cuff prolapse. The surgeons should be skilled about laparoscopic techniques and they should have enough experience about the pelvic floor disorders that may accompany the vaginal cuff prolapse (i.e., urinary incontinence).

Keywords: Laparoscopic sacrocolpopexy, vaginal cuff prolapse

[OP-220]

Hyperthermic intraperitoneal chemotherapy after secondary cytoreduction in epithelial ovarian cancer: a single-center experience

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Objective: Since the first use of hyperthermic intraperitoneal chemotherapy (HIPEC) on humans in 1980 it has been applied to a variety of malignancies. In recent years surgical cytoreduction followed by HIPEC was introduced as treatment modality in advanced epithelial ovarian cancer (EOC). The objective of this study is to analyze the postoperative complications and toxicity of the cytoreductive surgery (CRS) and HIPEC and the outcome of the patients' in recurrent EOC.

Material and Methods: Retrospective data analysis of 12 patients that underwent CRS and HIPEC in Medipol Mega University Hospital between June 2014 and April 2016 were conducted. Toxicity of HIPEC, postoperative complications and the outcomes of patients were evaluated. The data collected from the electronic patient record system. The decision of the treatment was discussed in tumor board meetings. All patients had cytoreductive surgery for peritoneal carcinomatosis. For patients with serous peritoneal carcinomatosis, cisplatin 100 mg/m²/lt was given, while mitomycin 25 mg/m²/lt was given to patients with mucinous carcinomatosis. These medications were given to the patients by intra-abdominal outflow with a temperature of 42 °C. The duration for HIPEC was 90 minutes for 9 patients and the duration for the remaining 3 was 45 minutes.

Results: The mean age of patients was 61 years (39-66 years). Out of 12 patients, 2 (16%) had mucinous carcinomatosis and the remaining 10 had serous peritoneal carcinomatosis. Maximal debulking surgery (none residual tumor) was performed on 8 patients (66%). The rest of the patients had optimal debulking surgery (visible tumor < 1 cm). Pleural effusion and atelectasis was found in four patients (33%), one patient (8%) had bowel perforation, one (8%) had ileocolic fistula and two patients (16%) had renal toxicity. In the follow up period (up to 23 months), none of the patients had any recurrence.

Conclusion: The results of this study – done on a relatively small group of patients- showed that CRS and HIPEC is a promising treatment for patients with recurrent EOC. The treatment has an acceptable morbidity and mortality rate with long term survival. Therefore, further studies on larger groups including many other factors such as the experience of the surgeon, the availability of highly intensive care units (ICU), complications, effects on morbidity and long term survival is needed.

Keywords: Cytoreductive surgery, hyperthermic intraperitoneal chemotherapy, peritoneal carcinomatosis, recurrent epithelial ovarian cancer

[OP-221]

Pregnancy in cancer survivors; experience of a University Hospital in Turkey

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Introduction: The aim of this study was to assess the obstetric and neonatal outcomes of the survivors of childhood and adolescence cancer.

Material and Methods: A retrospective analysis of 68 pregnancies with a history of cancer who had antenatal follow up and gave birth between 2000 and 2015 at İstanbul University Cerrahpaşa School of Medicine Obstetrics and Gynecology Department. To exclude cancer patients diagnosed during pregnancy, patients who gave birth during the first 10 months after diagnosis were not included in the study group. Clinical data regarding the cancer diagnosis and treatment, obstetric and neonatal outcomes were collected and analysed. Oncologic, obstetric, and pediatric files were screened to retrieve clinical information. Oncologic data included the type of cancer, the date of diagnosis, the type and date of treatment. Obstetric data included spontaneous fetal loss, legal termination of pregnancy, gestational age at diagnosis, obstetric complications, gestational age at delivery, fetal

Table 1. Clinical, obstetric and perinatal outcomes of patients

Age (year, mean±SD)	31.7±5.5
Nulliparity (n, %)	33, 48.5
Birth weight (gram, mean±SD)	3020±717
Birth week (mean±SD)	37.5±2.5
Birth before 37 week (n, %)	8, 12.1
Birth before 34 week (n, %)	6, 8.8
c-section delivery (n, %)	42, 66.6
FGR (n, %)	4, 5.8
Preeclampsia (n, %)	2, 2.9
Gestational diabetes (n, %)	6, 8.8
Termination (n, %)	3, 4.4
Abortion (n, %)	2, 2.9
Stillbirth (n, %)	1, 1.4
Neonatal Intensive Care Unit (n, %)	6, 8.8
Maternal Mortality (n, %)	---

growth restriction and mode of delivery. Pediatric data collected included birth weight, sex, congenital malformations, Apgar score at 1-5 minutes, admission to a neonatal intensive care unit, stillbirth and early neonatal death.

Results: The distribution of cancer types in the study populations are depicted in Table 1. The most frequently encountered tumor types in the cancer survivors were thyroid cancer (26.4%) hematologic malignancies (22.1%), genital malignancies (19.1%) and breast cancer (13.2%).

The clinical characteristics, obstetric and perinatal outcomes of the study populations are depicted in Table 2. The mean maternal age was 31.7±5.5 years, and the incidence of nulliparity was 48.5%. The mean gestational age at delivery was 37.5±2.5 weeks and mean birth weight 3020±717 gr, preterm delivery rate was 12.1% and the incidences of delivery less than 34 weeks of were 8.8%. The incidences of fetal growth restriction, preeclampsia and gestational diabetes were 5.8%, 2.9% and 8.8% respectively in the women with a history of cancer. In our study population did not have early neonatal mortality and congenital anomalies in newborns, and only 1 intrauterine fetal demise was detected at 28 weeks of gestation in breast cancer survivor. The incidence of cesarean section was 66.6%, the indication was planned repeat cesarean nearly half of them.

Table 2. Distribution of cancer types

Thyroid Cancer 18 26.5	Central nervous system 6 9
Thyroid Papillary Ca 17	Glioblastoma multiforme 2
Thyroid Medullary Ca 1	Anaplastic astrocytoma 1
	Cerebellar tm 1
	Spinal cord tm 1
	Glioma 1
Hematologic Malignancies 15 22	Skeletal system 3 4.5 Osteosarcoma 2
Hodgkin's lymphoma 7	Ewing sarcoma 1
Nonhodgkin lymphoma 2	
Acute leukemia 3	
Chronic myeloid leukemia 3	
Genital cancer 13 18	Skin cancer 3 4.5
Borderline mucinous over tm 6	Malign melanoma 2
Over adeno ca 2	Mucosis fungoides 1
Granulosa cell tm 1	
Immature teratoma 1	
CIN 3 2	
Vulva SCC 1	
Breast cancer 9 13.5	Other 1 1.5
Invasive ductal ca 8	Head-neck tm
Phyllodes tm 1	Tumor types N %

Conclusion: Our study revealed the data for a small group of patients in a single tertiary center. So it doesn't reflect the national data and further research are mandatory. The incidences of preeclampsia, gestational diabetes, fetal growth restriction show similar rates of general population. Cesarean section incidence was very high. There were no significant differences in pregnancy outcome. There was no increase in frequency of congenital malformations in pregnancies achieved after cancer treatment. As a result; this study has limited cases shows that there is no significant differences about expected obstetrics and neonatal complications between survivors and healthy populations. Cancer survivors should be encouraged to become pregnant after treatment and multidisciplinary team work is necessary for pregnancy follow up.

Keywords: Pregnancy, cancer, survivor

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[PP-002]

Nuclear factor-kappa beta pathway and endometrial cancer: A pilot study

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Objective: Examination of the role of nuclear factor-kappa beta (NF-kB) expression in the etiopathogenesis of endometrial cancer, by means of the immunohistochemical method.

Material and Methods: Patients who applied to participate in the study at the clinic were grouped into three categories: those diagnosed with benign endometrial pathology; those with endometrial hyperplasia; and those with endometrial cancer. NF-kB analysis was conducted in the endometrial tissues of the patients' paraffin blocks by means of the immunohistochemical method. For objective assessment purposes, the H score of each patient was calculated. SPSS 15.0 program was employed for statistical analysis.

Results: The average H score of the first group, comprising benign endometrial pathologies, was 102.4 ± 85.9 ; that of the hyperplasia group was 143.6 ± 122.4 ; and that of the cancer group was 276.8 ± 61.8 . The average values of groups 1 and 2 were similar ($p=0.349$); however, the third group's average H score was significantly higher ($p<0.001$).

Conclusion: NF-kB, which is a critical mediator in the inflammation process, might be related to the development of premalign and malignant endometrial changes.

Keywords: Endometrial cancer, endometrial hyperplasia, inflammation, NF-kB

[PP-003]

MPV, NLR and platelet count: New hematologic markers in diagnosis of malignant ovarian tumor

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Objective: Evaluation of MPV, NLR and platelet count in the detection of malignant and benign ovarian tumors.

Material and Methods: 66 patients who were admitted to our clinic for three years were included in the study. Patients diagnosed with ovarian cancer were grouped into the areas of epithelial and granulosa cell tumor diagnosis. The values were compared with patients with benign cystic structure. Patients' preoperative hematologic parameters and their values 4 weeks after the operation were analyzed. Statistical analyses were performed with SPSS 16.0 software (SPSS Inc.; Chicago, IL, USA).

Results: MPV, NLR and platelet count were observed at a higher rate as statistically significant in patients diagnosed with malignant ovarian cancer compared to those with benign adnexal mass.

Conclusion: The hematological parameters such as MPV, NLR and platelet count in the detection of malignant ovarian tumors have been evaluated as useful new markers.

Keywords: Malignancy, MPV, NLR, ovarian tumors

[PP-004]

Isolated recurrence of early stage cervical cancer with suboptimal surgery in abdominal wall

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Objective: The tumor recurrence in the anterior wall of the abdominal of a patient who had been operated for cervical cancer and subsequently took radiotherapy.

Case: A total abdominal hysterectomy and bilateral salpingo-oophorectomy (TAH+BSO) process was applied to a forty-seven-year old patient four years ago because of a benign gynecological reason, and in pathology results, in an unexpected way, a 3 and 1.5 diameter squamous cell carcinoma was identified in cervix in two separate focuses. For this reason, another operation was planned for the patient again and as complementary surgery, radical parametrectomy and pelvic-para-aortic lymphadenectomy process was applied to the patient. A high-dose-rate intracavitary brachytherapy in 6 fractions as 600 cGy was applied to the patient. The patient, without any complaint for almost four years after surgery and radiotherapy, admitted to the clinic with a sudden, though, palpable mass complaint in abdominal wall. In the examination, about 10x15 cm fixed and hard mass was palpated in patient's abdomen's anterior wall. In accordance with the procedures, a vertical incision was made in the abdomen. In the exploration, a 10x15 cm diameter tumoral mass, covering abdominal muscle and fascia, and having no relationship with intraabdominal cavity, was observed (Figure 1). This mass was resected with rectus muscle and fascia which it invaded. The resected material was sent for frozen examination and the result was reported as malignant tumor, with nuclear p63 and membranous CK 5/6 positivity, which was in accordance with squamous cell cancer in immunohistochemical examination of specimen, was identified (Figure 2).



Figure 1. Surgical exploration of abdominal mass

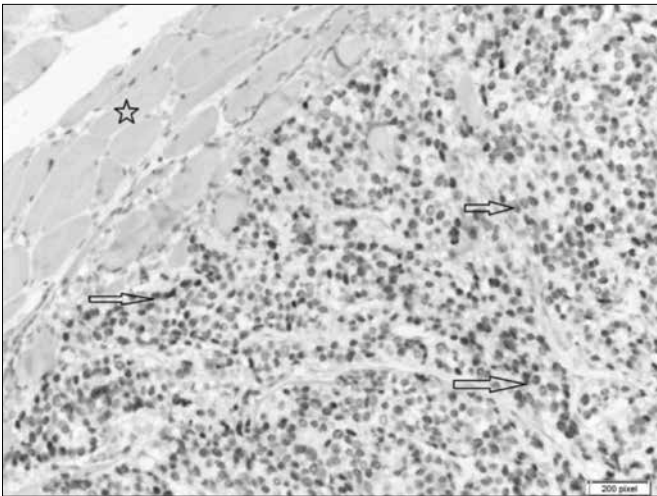


Figure 2. Nuclear p63 positivity with squamous cell cancer in immunohistochemical examination of specimen

Discussion: Although cervical cancer is a major health problem in developing countries, many patients are diagnosed during the pre-invasive cervical dysplasia or at a very early stage of cervical cancer, thanks to effective screening methods. In present conditions, with appropriate surgical treatment and adjuvant chemotherapy / radiotherapy options, cervical cancer is treated effectively. However, recurrence is a major health problem for these patients. In our case, cervical cancer had not been identified in the first surgery, and this diagnosis was confirmed with paraffin block studies of the hysterectomy material. Subsequently, the patient needed a second surgery and, in this session, the patient's surgical treatment was completed. Afterwards, radiotherapy was administered to the patient. The prolonged treatment period is considered to be effective on the recurrence development identified in the postoperative 4th year in the patient in the light of literature information, what distinguishes this case from similar cases published before is the recurrence region. Cervical cancer recurrence observed solitary in the anterior abdominal wall is important because it is the first published case.

Conclusion: Cervical cytology and appropriate evaluation of the tissue, even in patients scheduled for surgery for benign causes, is the gold standard in the diagnosis of microinvasive and/or early stage cervical cancer. Thus, the diagnosis of cervical cancer is not postponed and optimal surgical treatment is applied to patients.

Keywords: Cervix, cancer, recurrence, hysterectomy, abdominal wall

[PP-005]

Different HPV subtypes E6/E7 genes expression analysis in cervical dysplasia

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Objective: Determining the E6 and E7 carcinogenic proteins caused by various HPV sub-types, and investigating their effects on cervical dysplasia.

Material and Methods: Seventy seven patients who were 21 years old or over, and whose smear results were reported as ASCUS, ASC-H, LSIL, HSIL and AGC were included in the study. In order to determine the HPV DNA and the HPV types, the HPV sign Q24 Complete Kit, the Rotor-Gene and PyroMark Q24 (Qiagen, Germany) systems were used. Then, by using the NucliSENS EasyQ Genetic Analyzer device (Biomerieux, France), and utilizing the NASBA Method, the existence of E6 and E7 gene expression in HPV DNA positive samples was investigated with total fragment analysis method. The SPSS 22.0 Program was used in statistical analyses.

Results: When the HPV DNA was investigated in 77 cases (100%) who had abnormal sitology it was observed that in 22 (28,6%) cases the HPV DNA was positive, and in 55 (71,4%) cases the HPV DNA was negative. In 22 HPV DNA positive cases, the HPV E6/E7 mRNA was investigated; 8 cases were ASCUS and 3 (37,5%) cases had positive E6/E7 mRNA, 4 cases were ASC-H and 3 (75%) cases had positive E6/E7 mRNA, 8 cases were LGSIL and 4 (50%) had positive E6/E7 mRNA, 2 cases were HGSIL and 1 (50%) had positive E6/E7 mRNA.

Discussion: In our study, it has been determined that there is a direct relation between the increasing positivity rate of the HPV E6/E7 mRNA gen expression and the frequency of cervical dysplasia. This rate was determined as being statistically significant.

Keywords: HPV, HPV DNA, E6/E7 mRNA, cervical dysplasia

[PP-006]

Smear results of women with breast cancer using tamoxifen therapy in our clinic

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Objective: Our aim was to investigate the association of tamoxifen effect on cervico vaginal smears in patients with breast cancer in our clinic.

Material and Methods: The data of breast cancer patients who had received tamoxifen were analyzed between 2006-2014, retrospectively. Pap-smear results, age, gravidy, parity, smoking status, age of first birth, detailed gynecologic and obstetric history of patients were noted. Patients without receiving at least one year tamoxifen therapy and patients without smear controls or leaving and interrupting tamoxifen treatment were excluded. The smear results of groups (tamoxifen and control group) were analyzed.

Results: A total of 246 patients were included in this study. (123 tamoxifen, 123 control) None of the patients had servical squamous intraepithelial lesions and atypical glandular lesions. Atypical squamous cells were significantly higher in tamoxifen group compared to control group. ($p=0.03$) **Conclusion:** Tamoxifen may be associated with benign squamous atypia in cervical smears. Therefore, pelvic examination and pap-smear test are recommended to breast cancer patients annually.

Keywords: Tamoxifen, cervical smear, atypia

[PP-009]

Fetal akinesia deformation sequence: Report of two cases with a brief review of the literature

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Here in, we report two independent cases of fetal akinesia deformation sequence (FADS). The two emerging findings of these cases were polihidramnios and intrauterine growth restriction. Consequently, the detailed ultrasonographic scan revealed lack of fetal movement profile in association with abnormal position of the fetal limbs indicating FADS. Several different malformations were also accompanying these findings. In respect of current literature, FADS is known as a heterogeneous disorder characterised by deformational changes related to decreased or absent fetal movement. The underlying etiologies are various including neurogenic and myopathic disorders, restrictive dermopathy, teratogen exposure, and intrauterine constraint. In most of the cases, FADS is a lethal abnormality and early diagnosis of disease may allow safer surgical methods for termination.

Keywords: Fetal akinesia deformation sequence, fetal movement, lethal abnormality

[PP-015]

The evaluation of vaginal agenesis treated with modified McIndoe technique: A retrospective study

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Objective: Retrospective analysis of cases that have undergone neovagina operation because of congenital vaginal agenesis was objected.

Material and Methods: Seven cases applying with the complaints of primary amenorrhea or inability to have sexual intercourse were enrolled to the study. Cases were diagnosed with congenital vaginal agenesis and operated at Mustafa Kemal University Research Hospital between 2011 and 2014. Vaginoplasty by modified McIndoe method was performed to all of the cases. Evaluation parameters: Complaints on admission, chromosomal analysis, timing of the operation, perioperative and postoperative complications, vaginal length anatomically at preop and postop period, postoperative treatment and follow up and satisfaction with the sexual intercourse at postoperative period were all evaluated.

Results: Average age of our patients was 28.14 ± 8.61 (19-39) years. Complaints of patients on admission was inability to perform sexual intercourse and/or desire of child. One of the cases was unmarried and all others were married. According to chromosomal analysis, 1 patient was 46XX-45X0 (Mosaic Turner Syndrome), 1 patient was 46XY (Testicular feminisation) and other 5 patients were 46XX. All patients were operated by the modified McIndoe method. The average duration of operation was 2.7 ± 0.56 (2-3.5 hour). Postoperative infection was observed in one patient. In this infected patient graft failure occurred and debridement was performed in reoperation. No early complications was seen in others. Preoperative and postoperative average vaginal lengths were 1.85 ± 0.62 (1-3 cm) and 8.71 ± 1.11 (7-10 cm), respectively. Despite dyspareunia occurred in two cases who were not able to use dilatator regularly, one because of cancellation of marriage and the other because of postoperative infection, regular sexual life was achieved in remaining 5 (71%) cases.

Conclusion: Currently there is no concensus about the ideal method of making a functioning vagina among different specialities. However, McIndoe technique being the most applied method by gynecologists has the advantageous characteristics of being simple, minimally invasive and with low morbidity. But regular use of dilatator is a necessity for the success of this surgical procedure.

Keywords: Vaginal agenesis, modified McIndoe technique, neovagina

[PP-016]

Retroperitoneal extragastrointestinal giant stromal tumor: A case report

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Gastrointestinal stromal tumors (GIST) are the most frequently seen tumors of mesenchymal origin of the gastrointestinal tract. They are defined in localizations such as the mesentery, omentum and retroperitoneum besides the gastrointestinal tract and these are named extragastrointestinal stromal tumors (EGIST). There is no sufficient information about the clinical presentation and prevalence as EGISTs are very rarely

seen. Retroperitoneal extra-gastrointestinal stromal tumors are reported in the literature; however, giant retroperitoneal extra-gastrointestinal stromal tumors are very rare. A 51-year-old female patient who has 3 children presented to the Obstetrics and Gynecology Clinic with the complaints of abdominal swelling, pain and dysuria that had been persisting for 6 months, and which had exacerbated recently. A mass lesion occupying the whole of the abdomen and reaching above 7 cm over the umbilicus was palpated on the physical examination. Magnetic resonance imaging (MRI) was performed to better understand the relationship with surrounding tissue and the origin of the mass. A giant mass lesion occupying the whole of the lower quadrant of the abdomen and showing mass effect on the uterus and urinary bladder, containing cystic degenerations characterized with hypointensity in T1A series and of heterogeneous hyperintense appearance in T2A series, was detected, and the widest dimensions were measured as 22x27 cm (Figure 1). In differential diagnosis of the mass was suspected that it could be giant uterine myoma, ovarian mucinous cystadenocarcinoma, uterine sarcoma and tumor of any intraabdominal organ. The pa-

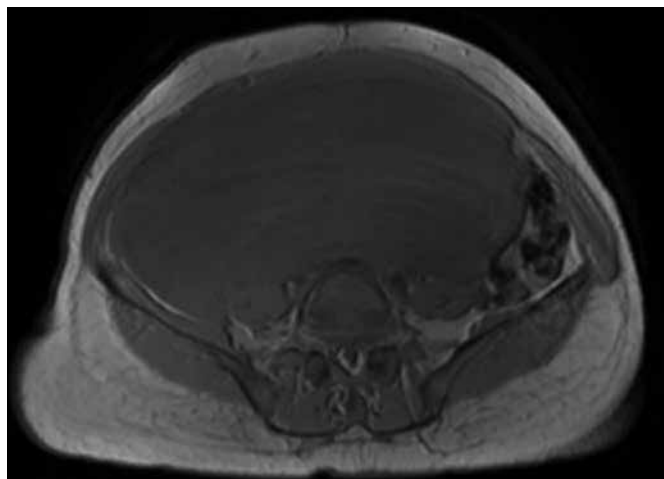


Figure 1. A giant mass lesion occupying the whole of the lower quadrant of the abdomen and showing mass effect on the uterus and urinary bladder, containing cystic degenerations characterized was detected, and the widest dimensions were measured as 22x27 cm

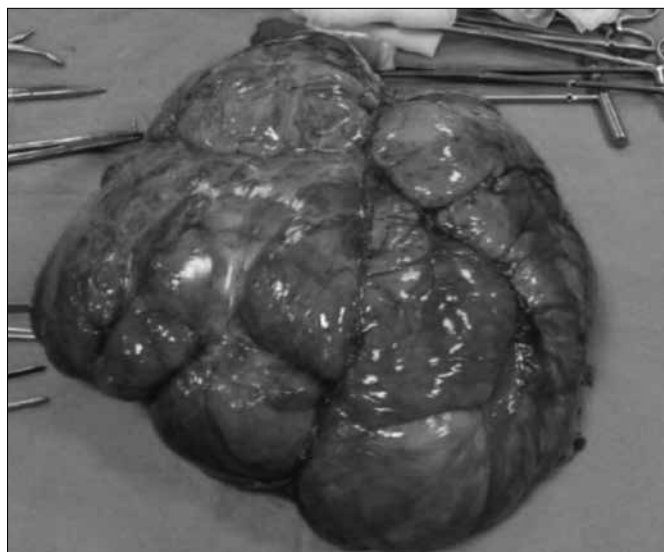


Figure 2. The mass was seen completely resected without rupture through a retroperitoneal approach

tient was operated and a mass lesion with approximately 27 cm size originating from the retroperitoneum in the right paramedian space with lobulated contour was observed (Figure 2). No visible metastasis to abdominal organs was detected. The mass was completely resected without rupture through a retroperitoneal approach.

Pathological findings were reported as fusiform cell extra-gastrointestinal stromal tumor weighing 4.455 kilograms with the widest dimension being 27 cm, staining positive for vimentin, CD34, SMA, caldesmone, CD117 (10-50% distribution), Ki 67, and negative for PR, ER, S-100, NF, Desmin, CD99, Bcl2, CD10, Calretinin and CD68. The patient was discharged on the postoperative day 7 as no complications developed. A 3-month adjuvant imatinib therapy was begun as the pathological findings were reported as high-risk EGIST. Clinicians must have adequate information about surgical and medical treatment of these giant dimensions tumors. In conclusion, in this case report, we have presented the case of rare giant retroperitoneal extragastrointestinal stromal tumor. Surgens should keep in mind the diagnosis of EGIST in patients with giant abdominal mass who apply to gynecology clinics before they planned the surgery with suspect of gynecological malignity. Surgery is gold standard for treatment and immunohistochemical analyses is required for diagnosis of EGIST.

Keywords: Retroperitoneal, gastrointestinal stromal tumor, immunohistochemical

[PP-017]

The outcomes of COH/IUI in patients with unilateral tubal occlusion diagnosed with HSG

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Objective: The aim of present study was to evaluate the pregnancy rates of intrauterine insemination (IUI) and controlled ovarian hyperstimulation (COH) in patients with diagnosis of one-sided tubal occlusion on hysterosalpingography (HSG).

Material and Methods: Patients who underwent COH/IUI were enrolled into this retrospective cohort study. The patients with one-sided tubal occlusion diagnosed on HSG who met the inclusion criteria were accepted as study group. The control group consisted of patients with unexplained infertility. The outcomes of COH/IUI were compared between study and control groups.

Results: 97 patients (study group=44, control group=53) who underwent COH/IUI treatment were included into study. The biochemical, clinical and ongoing pregnancy rates were similar between patients with unilateral occlusion diagnosed via HSG and those with unexplained infertility. The spontaneous pregnancy rate within one year was higher in patients with normal HSG than in patients with unilateral tubal occlusion but the difference did not show statistically significance.

Conclusion: Infertile patients with diagnosis of one-sided tubal occlusion on HSG can be managed like patients with unexplained infertility and normal findings on HSG. In addition, COH/IUI may be considered as the first treatment option in management of those patients.

Keywords: Unilateral tubal occlusion, infertility, intrauterine insemination

[PP-018]

The preventive effect of n-3 long-chain polyunsaturated fatty acids (EPA&DHA) on gestational diabetes mellitus and the effect on fetal cord brain-derived neurotrophic factor (BDNF) levels

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Objective: To investigate whether n-3 long-chain polyunsaturated fatty acids (n-3 LCPUFAs) supplementation is protective for gestational diabetes mellitus (GDM) or not and to describe the effect of GDM and n-3 LCPUFAs supplements on fetal cord brain-derived neurotrophic factor (BDNF).

Material and Methods: A total of 916 voluntary pregnant, 243 (n-3 LCPUFAs used) and 673 (n-3 LCPUFAs not used) were studied. The anthropometric measurements, body mass indexes (BMI) of the patients were recorded. Fasting plasma glucose (FPG), fasting plasma insulin (FPI), homeostasis model assessment-insulin resistance (HOMA-IR) were measured. Participants were followed up to birth who were grouped into 4 groups as n-3 LCPUFAs used + GDM, n-3 LCPUFAs used + non-GDM, No n-3 LCPUFAs used + GDM and No n-3 LCPUFAs used + non-GDM. Immediately after birth, a blood sample for BDNF analysis was obtained from the umbilical cord.

Results: The mean age of the women was 27.7±5.5 years. Although n-3 LCPUFAs used patients had high risk for GDM since they had

higher HOMA-IR scores only 13 (13.2%) of patients with GDM were from n-3 LCPUFAs used group and 85 (86.7%) were from the control group who did not use n-3 LCPUFAs (OR: 0.31; 95% CI: 0.11, 0.82; p=0.014). Fetal cord BDNF levels of n-3 LCPUFAs used patients were higher than the levels of controls, however the difference was

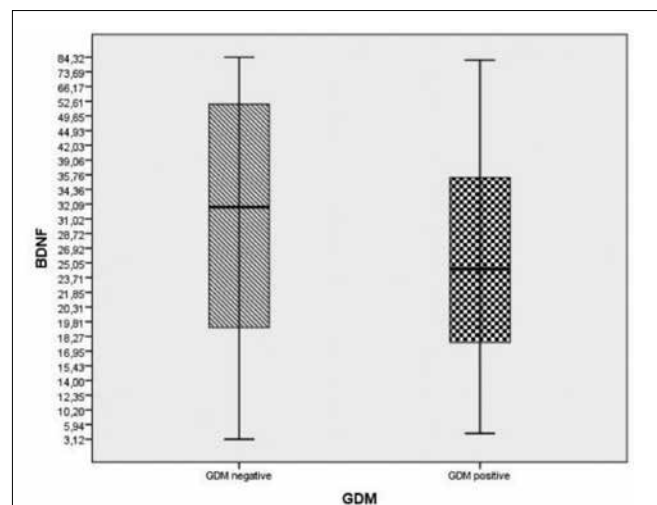


Figure 2. Fetal cord BDNF levels of GDM positive and negative patients

Table 1. Demographic properties of both using omega-3 pregnant and not-using pregnant included in the study. The data were given as mean ± standard deviation or n (%).

Characteristic	n-3 LCPUFA group (n=243)	Control group (n=673)	p
Maternal age (y)	27.9±5.2	27.7±5.6	0.72
BMI (kg/m ²)	26.6±5.1	26.2±5.4	0.67
Gestational age at delivery (wk)	38.7±0.9	38.6±0.9	0.76
Parity (n (%))			
Nulliparous	109 (44.8)	212 (31.5)	0.03*
Multiparous	134 (55.1)	460 (68.4)	
Maternal smoking	9 (3.7)	72 (10.6)	0.05*
MoD (n (%))			
Vaginal delivery	134 (55.1)	345 (51.2)	0.57*
Cesarian section	109 (44.8)	328 (48.7)	
HOMA-IR	2.8±1.9	2.1±1.5	0.01
WGDP (kg)	10.3±5.0	10.8±5.7	0.46
TSH	2.2±1.4	2.6±1.7	0.59
GDM based on GTT (two step approach)	13 (5.3%)	85 (12.6%)	0.01*
Baby gender (n (%))			
Boy	128 (52.6)	343 (50.9)	0.76*
Girl	115 (47.3)	330 (49)	
Birth weight (g)	3173±375	3285±390	0.02
Infant length (cm)	49.6±1.6	49.7±1.8	0.88
Infant head circumference	34.3±1.2	34.7±1.2	0.03
Gestational age (w)	38.7±0.9	38.6±0.9	0.76

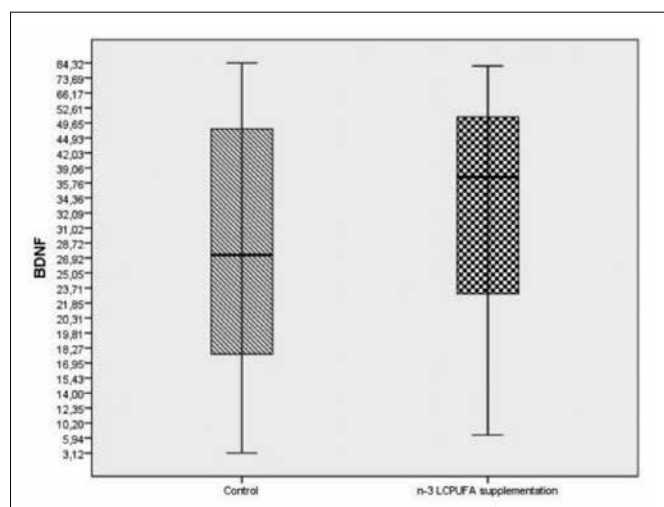


Figure 1. Fetal cord BDNF levels of n-3 LCPUFAs used and patients who did not use n-3 LCPUFAs

Table 2. Fetal cord BDNF levels of n-3 LCPUFAs used and control, GDM positive and GDM negative patients

Group	GDM Status n (%)	BDNF level (n) Mean±SD	95% Confidence interval for mean	p
n-3 LCPUFA upplementation 243 (26.5)	GDM positive 13 (5.3)	(4) 40.79±27.31	(-2.67, 84.25)	0.243*
n-3 LCPUFA Supplementation 243 (26.5)	GDM negative 230 (94.6)	(47) 40.52±21.46	(-11.75, 5.64)	0.48
Control 673 (73.4)	GDM positive 85 (12.6)	(28) 27.26±17.31	(20.54, 33.97)	0.243*
Control 673 (73.4)	GDM negative 588 (87.3)	(47) 37.46±25.50	(-11.75, 5.64)	0.48

not statistically significant (39.45 ± 21.59 vs 35.29 ± 24.24 , $p=0.28$). Fetal cord BDNF levels of patients with GDM were significantly lower than the BDNF levels of patients without GDM (28.95 ± 18.81 vs 38.56 ± 24.09 , $p=0.03$).

Conclusion: n-3 LCPUFAs use may decrease GDM risk. The fetal cord BDNF scores were significantly lower in GDM patients when compared to patients without GDM. The effect of n-3 LCPUFAs supplements on fetal cord BDNF levels were not statistically significant.

Keywords: n-3 long-chain polyunsaturated fatty acids, gestational diabetes mellitus, brain-derived neurotrophic factor, umbilical cord

[PP-019]

Finding mesothelioma Incidentally during laparoscopic evaluation in a patient who had ascites: A case report and brief literature review Malignant Mesothelioma

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Malignant mesothelioma, which is often associated with asbestos, has an rare, aggressive, invasive character tumor. Here we present a case who had non specific symptoms except about 150 cc of free fluid (ascites) in the abdominal cavity. Pathologic examination of omentum biopsy were reported malignant mesothelioma despite normal appearance of intraabdominal organs and surfaces.

Our case is a 47 -year-old gravida 3, Parity is 2, admitted to our hospital detecting pelvic fluid in ultrasound which was made for another reason. Resume and family background did not feature any special situation. At left adnexal region were observed in approximately 4x2 cm anechoic cyst by transvaginal ultrasonography. Computed tomography had been

reported as diffuse free fluid and left adnexal lesion mentioned formerly. Tumor markers and biochemical tests (CA125, CA19-9 and CEA, AFP) were detected as negative. We decided to perform diagnostic laparoscopy after counseling and informed patient. During laparoscopy, about 150 cc of serous qualified acid was observed in the Douglas cavity. Bilateral ovaries, uterus, peritoneal surfaces, bowels and omentum were seen as normal, visible lesion not detected. The patient underwent laparoscopic right salpingo-oophorectomy. Intraoperative frozen section were reported negative in terms of malignancy. Then left salpingectomy, omentum and multipl peritoneal biopsies were performed. The final histopathological examination of aspiration of fluids were reported as plenty of mesothelial cells and also a small number of suspicious malignant cells. The omentum welded sample was reported as epithelial malignant mesothelioma. Immunohistochemical analysis of neoplastic cells was reported as calretinin and CK 5/6 has shown positive labeling, CK7 staining was not observed.

Malignant mesothelioma is an aggressive malignant tumor with increasing frequency. As in our case, about 40% are diagnosed Incidentally during evaluation. We evaluated ascites via laparoscopically. Although intraabdominal organs and peritoneal surfaces were seen normally, we detected mesothelioma in the omental biopsy Incidentally. In case of abnormal situation, even in normal appearance of organs and surfaces being seen during the operation, the phase of staging surgery such as taking pelvic wash samples, multiple peritoneal sampling and omentum biopsy may be diagnostic for rare malignancy.

Keywords: Ovarian CA, malignant mesothelioma, ascites

[PP-020]

Atypically localized Bartholin cyst at adolescence age

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The Bartholin glands are the major glands of vestibulum. Anatomically, they are located at the both sides of the hymen under labia majora. The function of Bartholin glands is to secrete mucus into the introitus. Being in line with 4 and 8 hours of a clock, Bartholin glands have 2-2.5 cm long ducts that extend to introitus. A Bartholin cyst occurs when any of the ducts is blocked due to infectious or noninfectious reasons and the secretion of mucus from the gland is obstructed. They cannot be detected during an examination unless they become cystic. The prevalence of Bartholin cyst is approximately 2% and they occur around 30 years of age. Bartholin gland may cause pain due to an infection or discomfort and pain due to swelling during walking, sitting or intercourse. We present an unusual localization of Bartholin cyst which was atypically located in labia minora. There is no Bartholin cyst located ectopically in labia minora in checking PubMed publications.

A 16-year-old teenage, virgine, was admitted to our clinic with perineal swelling started eight months ago. Her gynecological examination revealed a cystic mass which was 4 cm in diameter on the outer side of right labia minora (Figure 1). Gynecological examination was normal. In the transabdominal ultrasonographic observation, the uterus and

Table 1. Maternal age, embryonic heart rate (EHR), crown-rump length (CRL), mean gestational sac diameter (MGSD), yolk sac diameter (YSD), and gestational ages by CRL and MGSD in the normal outcome and miscarriage groups. Unimodal data is given as mean \pm SD and non-normal data as median (Q1–Q3)

	Normal Outcome (n=362)	Miscarriage (n=53)	P
Maternal age in years, mean \pm SD	27.19 \pm 5.32	29.21 \pm 6.56	0.01
EHR (bpm)	156 (145–172)	122 (84.5–145)	<0.001
CRL mm	10 (6.16–17.31)	5.68 (3.92–10.69)	<0.001
MGSD mm	33.05 \pm 10.71	24.23 \pm 8.87	<0.001
YSD mm	4.25 \pm 0.75	4.49 \pm 1.40	0.213
GA by CRL day	50 (45–57)	44 (43–50)	<0.001
GA by GSD day	57.73 \pm 10.24	49.32 \pm 8.97	<0.001
Proposed sum of differences	6 (0–14)	22 (10–32)	<0.001

GA: Gestational age

adnexial structures were normal. Pap smear test and cervical culture were not performed as she was virgine. The mass was considered to be an trikelamma or lipom. Operation was carried out a week later. Under local anesthesia, the mass was excised completely with skin and abial aesthetic was performed. The material was sent to pathology for diagnosis. The patient was discharged in the first day after operation without any complication. Histopathological examination revealed a 4 cm cystic mass macroscopically (Figure 2) and cystic lesion lined by transitional epithelium (Figure 3). The patient recovered completely with no recurrence of the lesion.

A normal bartholin gland has a tubuloalveolar form; its cavity is covered with single layer columnar epithelium and its duct with transitional epithelium. A bartholin cyst is diagnosed when the duct covered by transitional epithelium expands after being blocked and the transitional epithelium forms the wall of a cystic structure (Figure 3-4).

This was the first case we encountered where the bartholin gland was localized atypically in adolescence. It is probably the last lesion that comes to mind among cystic enlargements localized at labia minor.

Our lesion has been reported as an atypically localized bartholin cyst. It is very difficult to make an early diagnosis for an atypically localized bartholin cystic lesion in adolescence; it can be diagnosed only after a pathological examination. In the differential diagnosis of a vulvar lump, atypically localized Bartholin cyst should also be considered and added to the literature.

Keywords: Bartholin Cyst, atypical Localization, adolescence

[PP-021]

Ultrasound prediction of spontaneous abortions in live embryos in the first trimester

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Objective: To generate a prediction model for miscarriage in women with a viable single pregnancy from first-trimester ultrasound findings and maternal characteristics.

Material and Methods: A prospective, cross-sectional study of 415 singleton pregnancies was performed. The initial ultrasound parameters were crown-rump length (CRL), mean gestational sac diameter (MGSD), yolk sac diameter (YSD), and the sum of the differences between gestational ages and embryonic heart rate (EHR). Potential predictors for spontaneous miscarriage occurring prior to 20 weeks were evaluated.

Results: Fifty-three (12.8%) patients had miscarriages and 362 (87.2%) had normal outcomes. Forty-three (81.2%) miscarriages occurred in the first trimester, 5 (9.4%) in the second trimester, and 5 (9.4%) represented fetal anomalies. EHR, CRL, and MGSD were decreased in the miscarriage group ($p < 0.001$); YSD showed no difference ($p = 0.21$). Gestational age by CRL and by MGSD were different between the groups ($p < 0.001$). The proposed sum of differences was higher in the miscarriage group ($p < 0.001$). Maternal age, indication for scan, gestational age by MGSD and CRL, heart rate, and proposed sum of differences were found to be potential predictors.

Conclusion: Miscarriage can be predicted via maternal characteristics and ultrasound findings. Advancing maternal age, low EHR, and high proposed sum of differences increase the probability of miscarriage.

Keywords: Ultrasound, prediction, abortion, first trimester

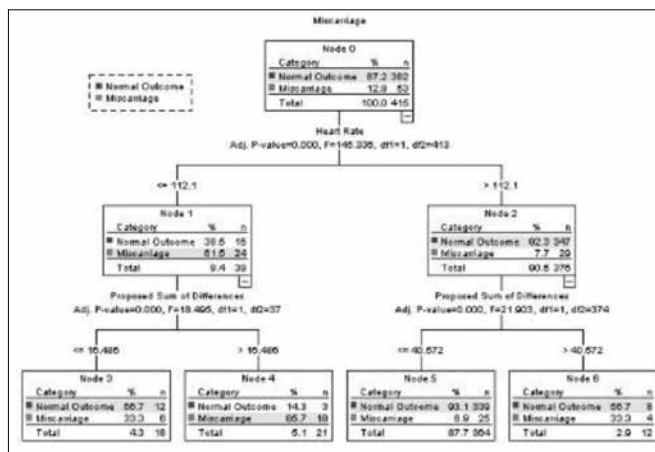


Figure 2. Decision tree for the prediction of risk of subsequent spontaneous miscarriage in live embryos in the first trimester

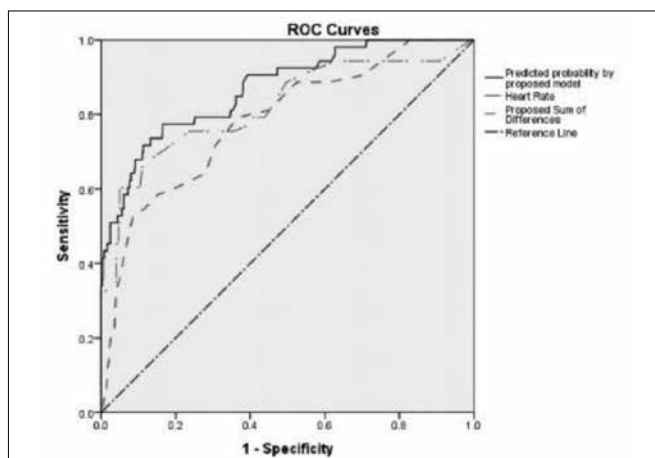


Figure 1. ROC curves for the proposed model, heart rate, and proposed sum of differences

[PP-022]

The effect of smoking in pregnancy on fetal umbilical cord brain derived neurotrophic factor (BDNF) levels

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Objective: To investigate the effect of smoking on fetal umbilical cord Brain Derived Neurotrophic Factor (BDNF) in smoker pregnant.

Material and Methods: This prospective study was conducted on 27 pregnant women who smoked during their pregnancy and their age/parity matched 40 healthy non-smoker pregnant. All participants gave birth at 37-42 gestational weeks. At birth with cesarean section or vaginal delivery, immediately after clamping the umbilical cord blood sample was taken from umbilical vein. Serum BDNF levels were studied from the blood samples and the comparison between BDNF levels between control and study groups were analysed.

Results: Fetal chord BDNF levels of infants of smoker pregnant were significantly lower than the BDNF levels of infants of non-smokers (32.1 ± 16.5 ng/mL and 50.7 ± 28.3 ng/mL respectively, $p=0.003$). BDNF levels of girl infants were 20.56 ng/mL (Confidence Interval: 6.42-34.70) higher than the boys. In girl infants of smoker pregnant

Table 1. A comparison of the demographic characteristics and biochemical findings of the study and control groups.*Ki-kare testi, BDNF-Brain derived neurotrophic factor

	Smoking group (n=27)	Control group (n=40)	p
Age	27.7 \pm 5.5	25.9 \pm 5.5	0.18
Nulliparous/ Multiparous (%)	5 (18.5)/22 (81.5)	14 (35.0)/26 (65.0)	0.14*
Normal/Cesarean delivery (%)	12 (44.4)/15 (55.6)	21 (52.5)/19 (47.5)	0.51*
Boy/Girl Infant (%)	11 (40.7)/16 (59.3)	23 (57.5)/17 (42.5)	0.17*
BMI (Weight/height ²)	27.6 \pm 3.8	24.4 \pm 4.1	0.003
TSH	2.8 \pm 3.1	1.7 \pm 0.9	0.08
Gestational age (w)	38.8 \pm 0.9	38.7 \pm 1.0	0.59
Birth weight (g)	3197 \pm 434	3204 \pm 331	0.94
Head circumference (cm)	34.2 \pm 1.1	34.6 \pm 1.1	0.14
Length (cm)	49.6 \pm 1.6	49.3 \pm 1.6	0.48
Weight gain	10.7 \pm 4.7	11.1 \pm 4.0	0.66
BDNF (pg/mL)	32.1 \pm 16.5	50.7 \pm 28.3	0.003

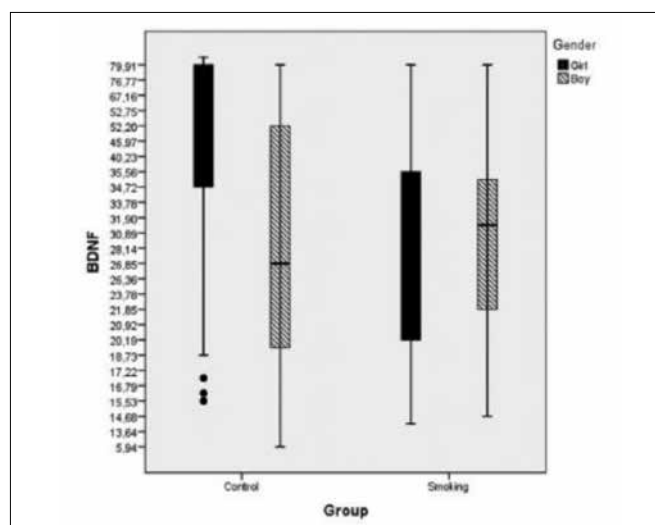


Figure 1. Brain-derived neurotrophic factor (BDNF) levels by gender in the study and control groups

the mean BDNF level is 31.66 ± 18.41 ng/mL and in boy infants is 32.47 ± 15.80 ng/mL. However, the mean BDNF level in girl neonates of control group is 60.63 ± 25.93 ng/mL and in boy infants is 37.30 ± 26.55 ng/mL. Multivariate analysis revealed that infant sex has significant effect on fetal chord BDNF levels ($p=0.005$).

Conclusion: Fetal chord BDNF level can be a predictor of assessing the effect of exposure to smoke during antenatal period on neurologic development.

Keywords: Pregnancy, brain-derived neurotrophic factor (BDNF), umbilical cord, smoking

[PP-023]

The effect of maternal hypothyroidism on fetal umbilical cord brain-derived neurotrophic factor levels

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Objective: Brain derived neurotrophic factor (BDNF) is the most important neurotrophin which helps the differentiation and growth of central and peripheral neurons, and facilitates synaptic transmission. In this study we aimed to investigate fetal cord BDNF levels of infants born from subclinical and clinical maternal hypothyroidism.

Material and Methods: This study was conducted on a total of 67 pregnant women who were followed up in Obstetrics and Gynecology outpatient clinics, 27 with maternal hyperthyroidism and 40 age-parity matched healthy pregnant without hypothyroidism. Immediately af-

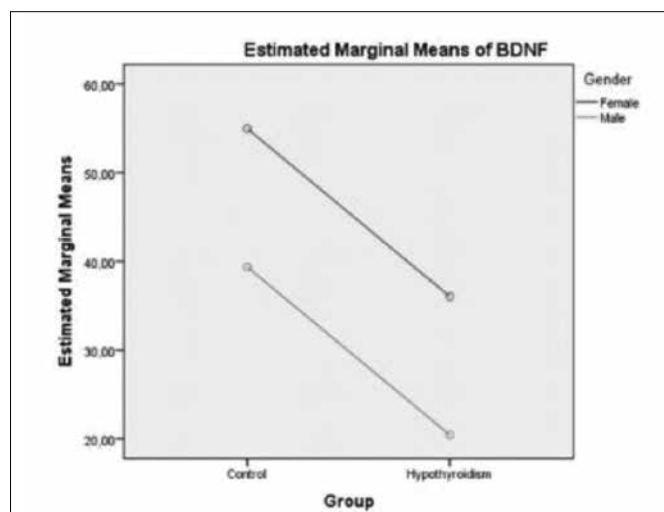


Figure 1. Brain-Derived Neurotrophic Factor (BDNF) levels in the maternal hypothyroidism and control groups according to infant gender

Table 1. A comparison of the demographic characteristics and biochemical findings of the study and control groups. BDNF-Brain-Derived Neurotrophic Factor

	Maternal hypothyroidism (n=27)	Control (n=40)	P
Maternal age	29.2±5.9	27.5±4.5	0.20
Nulliparous/Multiparous (%)	9 (33.3)/18 (66.7)	15 (37.5)/25 (62.5)	0.72
Normal/Cesarean delivery (%)	15 (55.6)/12 (44.4)	21 (52.5)/19 (47.5)	0.80
Girl/Boy infant (%)	9 (33.3)/18 (66.7)	23 (57.5)/17 (42.5)	0.05
Maternal BMI	29.1±8.9	24.4±4.1	0.07
Maternal TSH (uIU/mL)	3.6±2.6	1.7±0.9	<0.001
Gestational age	38.5±0.7	38.6±1.0	0.34
Birth weight	3404±314	3204±331	0.01
Head circumference	35.0±1.1	34.6±1.1	0.13
Infant length	50.0±1.5	49.3±1.6	0.12
Weight gain	10.5±4.2	11.1±4.0	0.57
BDNF	23.3±17.4	50.7±28.3	<0.001

ter vaginal or cesarean delivery fetal cord blood samples were taken from these patients and BDNF levels were measured.

Results: BDNF levels of infants born from pregnant with maternal hypothyroidism were significantly lower than the control group (23.3±17.4 and 50.7±28.3 respectively, $p<0.001$). In multiple linear regression analysis, while BDNF level was related with maternal hypothyroidism and infant sex, it was not associated with mode of delivery, maternal age, total weight gain during pregnancy, gestational age at birth, thyroid stimulating hormone (TSH) levels and other neonatal data.

Conclusion: This study shows that fetal cord BDNF levels in infants of pregnant with hypothyroidism were significantly decreased.

Keywords: Brain derived neurotrophic factor, levothyroxine, maternal hypothyroidism, pregnancy

[PP-024]

Effects of maternal smoking during pregnancy on doppler flow velocity waveforms at 37th week of gestation and placental and infant birth weight: Prospective study

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Objective: This study evaluated effects of maternal smoking during pregnancy on arterial blood flow velocities in the fetal-placental-maternal circulation, and the pathophysiological relationship with placental and fetal birth weight.

Material and Methods: A total of 148 singleton pregnancies in 59 smokers and 89 non-smoking controls were examined during the 37th week of gestation. Blood flow in the maternal uterine, fetal umbilical, and middle cerebral arteries was analyzed with Doppler ultrasonography.

Results: Statistically significant differences in Doppler waveforms were detected in the fetal umbilical artery ($p<0.05$), but not in either uterine or fetal middle cerebral arteries ($p>0.05$). Both infant birth-weight and placental weight were significantly decreased by maternal smoking ($p<0.001$ for both).

Conclusion: Maternal smoking during pregnancy did not affect either maternal uterine or fetal middle cerebral arterial blood flow, but did lead to deterioration of blood flow in the fetal umbilical artery.

Table 1. Demographic properties of both heavy smoker pregnant and non-smoker pregnant included in the study. The data were given as mean± standard deviation or n (%)

	Smoking pregnancies N=59	Non-smoking pregnancies N=89	P value
Maternal age (years)	26.4±5.6	28.2±5.7	0.041
Parity n, (%)			
Nulliparous	21 (35.6)	31 (34.8)	0.80
Multiparous	38 (64.4)	58 (65.2)	
BMI	27.6±2.1	26.5±2.4	0.52
Weight gain (kg)	11.7±3.8	13.1±5.0	0.07
Placenta weight (g)	561.3±121.9	687±156.1	<0.001
Birth weight (g)	3015.5±424.5	3208.2±404.5	<0.001
LBW (<2500g)	11(18.6%)	2 (2.2%)	0.001
Gestational age (weeks)	38.6±1.6	39.2±1.4	0.78

Table 2. Comparison of Doppler findings between groups

	Smoking pregnancies N=59	Non-smoking pregnancies N=89	P value
UtA PI	0.72±0.18	0.70±0.17	0.402
UtA RI	0.48±0.06	0.46±0.07	0.075
UtA S/D	1.86±0.34	1.90±0.30	0.948
UmbA PI	1.05±0.25	0.95±0.15	0.02
UmbA RI	0.62±0.08	0.58±0.06	0.02
UmbA S/D	2.84±0.71	2.48±0.42	0.01
MCA PI	1.82±0.58	1.82±0.29	0.69
MCA RI	0.76±0.07	0.77±0.07	0.20
MCA S/D	6.10±6.4	5.06±1.31	0.92
MCA-PSV (cm/s)	58.4±20.8	57.2±13.39	0.66
Amniotic fluid index (mm)	153.0±35.9	156.3±44.6	0.63

Keywords: Doppler ultrasonography, maternal smoking, middle cerebral artery, umbilical artery, uterine artery

[PP-025]

The retrospective analysis of cases diagnosed with granulosa cell tumors

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Objective: We analysed the features of the cases who have been operated in last 5 years and had the diagnosis of granulosa cell tumor.

Material and Methods: Demographic characteristics, surgical procedure, and the stage of the disease are evaluated separately in twenty patients with granulosa cell tumor.

Results: Twenty patients who had the diagnosis of granulosa cell tumor are involved in our study. The mean age of patients is 54.4±13.6. The mean diameter of tumor is 10.9±3.7 cm. Pelvic and paraaortic lymphadenectomy and omentectomy have been done in all of the patients. However primary and complementary surgical procedures also have been done. The number of lymph nodes dissected from pelvic area is 16±8.9 and the number of lymph nodes dissected from paraaortic area is 12.6±5.6. One patient is evaluated as Stage IC and the rest of all are evaluated as Stage IA. The patient with advanced stage has taken an adjuvant chemotherapy protocol consists of bleomycin, etoposid and cisplatin. Other patients (Stage IA) did not have adjuvant chemotherapy. By the date the manuscript has been written, all of the patients have been alive.

Conclusion: Granulosa cell tumor is a malignant neoplasm which has originated from ovary and evaluated among the sex cord stromal tumors. Since the disease is usually limited in one ovarian tissue and the disease does not exhibit invasion and metastasis, perfect survival rates are approached by effective surgical procedures.

Keywords: Adjuvant therapy, granulosa cell tumor, lymphadenectomy, metastasis, omentectomy

[PP-026]

Family planning among women in Bahçelievler district in İstanbul

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Objective: Although there are variable choices of contraception, unplanned pregnancies are still a matter of family planning (1). Improvement in pharmaceuticals and pre-clinical trials aim to scale up the contraceptive methods to a more applicable form for daily practice. Contraception preferences varies in different cultures and different countries but sociocultural status and neighbourhood are the most significant factors that affect the preference (2). In this study, we analysed the distribution of contraceptive methods in women attending to our gynecology clinic in İstanbul.

Material and Methods: Eighteen to fiftyfour years old, 1223 women who attended to our gynecology clinic during 2010-2013 were included in this study. Pregnancy, menopause, virginity were the exclusion criteria. In gynecological evaluation, patients were questioned about their contraception preferences and data were collected.

Results: Patients included in this study (n=1223) were distributed into seven categories. Male contraception was the first category and 782 patients (63.94%) agreed with it. Oral contraceptives were used by 12.01% of the patients (n=147). The other categories were as follows; RIA 19.46% of the patients (n=238), BTL 3.84% of the patients (n=47), depot injections 0.49% of the patients (n=6), coitus interruptus 0.19% of the patients (n=2), vasectomy 0.08% of the patients (n=1) (Graphic 1).

Age distribution of these categories were as follows; RIA (19-54 years), OKS (18-45 years), BTL (31-60 years), male contraception (20-46 years), coitus interruptus (35-42 years), depot injections (28-33 years).

Conclusion: Male contraception is still the most preferred method of contraception even in a so-called socially developed district of the

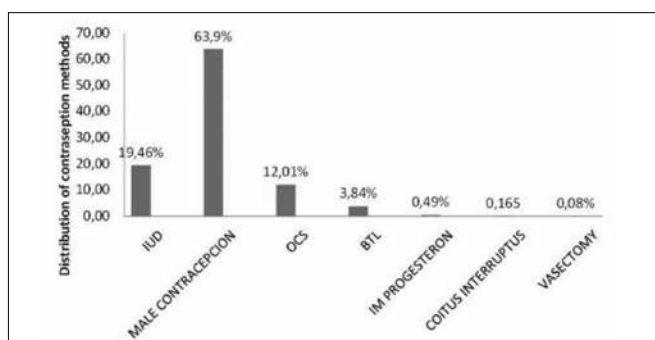


Figure 1. Contraception preference of patients at a private hospital in European side of İstanbul

İstanbul city. This preference may be attributed to several factors; emigration of families from lower socioeconomic status to more civilised districts, prejudice that the contraceptive methods cause infertility and adverse effects of pharmaceuticals.

Keywords: contraception, family planning

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[PP-027]

Ovarian steroid cell tumor, not otherwise specified and concomitant stromal Leydig cell hyperplasia: A extremely rare cause of postmenopausal virilism

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Background: The World Health Organization (WHO) has recently changed classification of sex cord-stromal tumors. These tumors are divided into three groups; a) pure stromal tumors, b) pure sex cord tumors, and c) mixed sex cord-stromal tumors. Steroid cell tumor-NOS (not otherwise specified) was included into third group. Both steroid cell tumor-NOS and Leydig cell hyperplasia are rare ovarian pathologies. In this report, we aim to describe the first case of ipsilateral steroid cell tumor-NOS and the contralateral stromal Leydig cell hyperplasia, according to our research in English literature.

Case presentation: A 58-year-old postmenopausal woman with hirsutism and virilism. Physical and gynecological examination, transvaginal sonography, MRI and hormone analyses were performed. Serum total testosterone level was 680 ng/dL. Hysterectomy and bilateral salpingo-oophorectomy were performed. Histopathology revealed right ovary steroid cell tumor-NOS and left ovary stromal Leydig cell hyperplasia. Hyperandrogenism and virilisation may be alert symptoms for androgen producing ovarian tumor. Steroid cell tumor-NOS and stromal Leydig cell hyperplasia can be diagnosed preoperatively with signs of virilisation, hormonal profile, careful transvaginal sonography and MRI evaluation.

Conclusion: Steroid cell tumor-NOS and stromal Leydig cell hyperplasia can be diagnosed preoperatively with signs of virilisation, hormonal profile, careful transvaginal sonography and MRI evaluation. Choices of management such as total abdominal hysterectomy with bilateral salpingo-oophorectomy or oophorectomy are depends on patient's condition. Postoperative follow-up should be done with serum testosterone levels, MRI or PET-CT.



Figure 2. Transvaginal gray scale sonogram, well-defined hyperechoic solid mass in the left ovary



Figure 1. Transvaginal gray scale sonogram, well-defined slightly echogenic solid mass in the right ovary

Keywords: Hyperandrogenism, Leydig cell hyperplasia, Steroid cell tumor-NOS, ovary, postmenopause

[PP-028]

Isolated torsion of the fallopian tube with and without pregnancy: Report of two cases

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Objective: Ovarian torsion is one of the most common gynecologic emergencies; however, isolated torsion of the fallopian tube is a rare

event. Here we report isolated torsion of fallopian tube in a 41 year old nonpregnant woman and a 25 year old pregnant woman.

Case 1: A 25-year-old, 372/7 weeks pregnant woman was admitted to clinic due to acute onset right lower abdominal pain. She had a history of bilateral hydronephrosis detected at 9th gestational week and insertion of bilateral double J stents due to progression to grade 2 hydronephrosis at 20th week. The course of pregnancy was otherwise uneventful. Ultrasound examination revealed a fetus with normal biometric measurements, an anteriorly located placenta and normal amniotic fluid volume. There were no uterine contractions. Fetal heart rate tracing was normal. Maternal vital signs were normal. Her hemoglobin (Hb) was 16.1g/dL, hematocrit (Hct) was 47% and leucocyte count was 11.260/mm³. Urology and general surgery evaluations were negative for any acute pathology. Because of continuing pain, cesarean section was performed with spinal anesthesia. A 2980 g female baby with normal 1st and 5th minute APGAR scores was delivered. With exteriorization of the uterus, an isolated torsion was observed on the right fallopian tube which was hydropic and purple. Five minutes after immediate detorsion, tubal color returned to normal, so, salpingectomy was not performed (Figure 1a, b). She was discharged on the second postoperative day with cure.

Case 2: 41 year old woman (G2P1A1) admitted to emergency department with aggravation of lower abdominal pain that was present for the last 3 days. She had no nausea, vomiting or other gastrointestinal signs and had normal vital signs. There was minimal pain on left lower quadrant on palpation. Transvaginal ultrasound showed a left adnexial 35*40 mm cystic lesion and 3 cm depth of free cul-de-sac fluid. Her serum β -hCG was negative, Hb was 10.2 g/dL, Hct was 32.6%. She was seen at the outpatient clinic the previous day with the same complaint; that time her Hb was 11.4 g/dL and there was minimal cul-de-sac liquid. She was admitted for a possible diagnosis of cyst rupture. During follow up, her Hb showed a progressive decline to 7.3 g/dL. Upon this, we



Figure 1. a, b. Isolated torsion on the right fallopian tube (a), and normal appearance five minutes later (b)

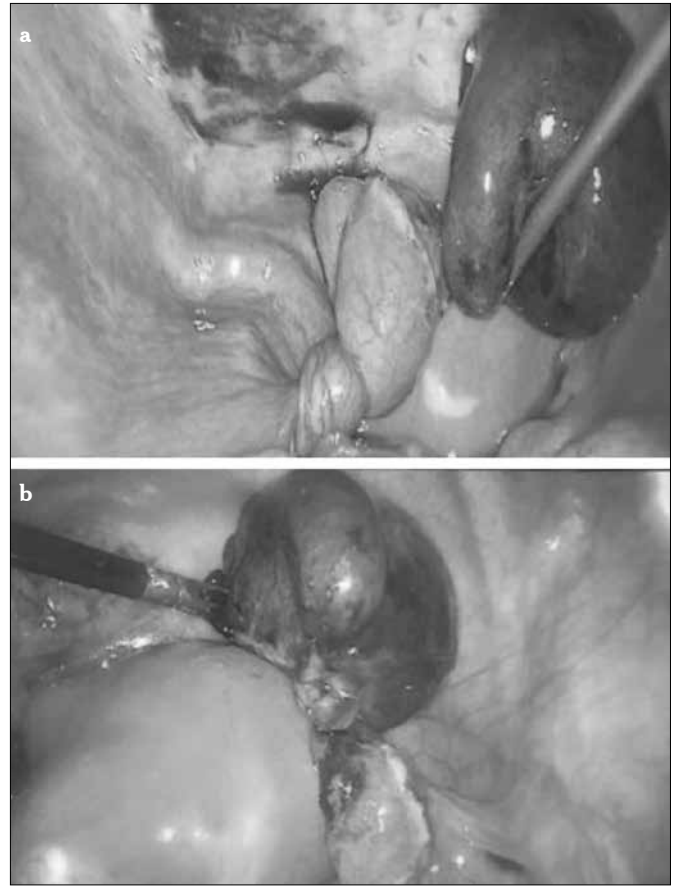


Figure 2. a, b. Isolated torsion of left fallopian tube with a necrotic appearance

performed a diagnostic laparoscopy which revealed some free sero-hemorrhagic fluid in the pelvis, normal right adnexa, normal left ovary and an isolated torsion of left fallopian tube with a necrotic appearance (Figure 2a, b). The color of the tube showed no change upon detorsion, therefore a left salpingectomy was performed. Ampullary portion of the tube was cystically dilated because of bleeding into tubal wall which was the cystic structure that we saw during ultrasound examination. Hb decline was later thought to be dilutional. The pathology of the tube was reported as chronic salpingitis and organized hematoma.

Conclusion: Isolated torsion of the fallopian tube is a rare gynecologic emergency. It should be considered in the differential diagnosis in either pregnant or non-pregnant women presenting with lower abdominal pain. Early diagnosis is important for the conservation of the fallopian tube.

Keywords: Fallopian tube, isolated torsion of fallopian tube, fallopian tube torsion in pregnancy

[PP-029]

Factors influencing the uptake of invasive prenatal testing by pregnant women

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Objective: We aimed to analyze the factors influencing the maternal uptake of invasive prenatal testing.

Material and Methods: We compared the distributions of invasive test uptake relevant to the maternal age, obstetric history, Trainingal level, abnormal screening tests, structural malformations and living area.

Results: In 1412 referred patient, we offered invasive prenatal testing to 291 women (291/1412, 20.6%). The 143 women opted for invasive testing (49.1%). Abnormal prenatal screening tests were found to have no effect on the uptake of invasive testing by the women of advanced maternal age (AMA). The only demographic parameter that affects the uptake of invasive testing was the location, and women who were living in the rural areas had a higher rate of uptake (p: 0.026) No statistically significant difference was detected for the uptake of test with respect to age, Trainingal level, previous pregnancy loss (p>0.05) (Table 1).

Table 1. Distributions according to maternal age, obstetric history, Trainingal level and living area at presentation and uptake of invasive tests

	Invasive done n (%)	Reject n (%)	p
Application reason			
First trimester screening test risk	32 (62.7)	19 (37.3)	0.248
Second trimester screening test risk	27 (44.3)	34 (55.7)	
Suspicious congenital malformation	34 (44.7)	42 (55.3)	
Isolated advanced maternal age	43 (50.0)	43 (50.0)	
Previous pregnancy with autosomal trisomy	7 (41.2)	10 (58.8)	
Previous fetal loss			
One or more than one	44 (44.9)	54 (55.1)	0.302
No History of foetal loss	99 (51.3)	94 (48.7)	
Living area			
Country side	43 (60.6)	28 (39.4)	0.027
City center	100 (45.5)	120 (54.5)	
Parity			
Nulliparous	38 (50.7)	37 (49.3)	0.759
Multiparous	105 (48.6)	111 (51.4)	
Maternal age (years)			
>35	75 (50.7)	73 (49.3)	0.594
35<	68 (47.6)	75 (52.4)	
Trainingal level			
Low	86 (48.9)	90 (51.1)	0.805
Middle	33 (47.1)	37 (52.9)	
High	24 (53.3)	21 (46.7)	

Conclusion: The uptake of invasive diagnostic tests by the pregnant women is determined by the complex network of personal and social factors rather than screening tests, and maternal age. Therefore, antenatal screening, and genetic counselling program taking into account these factors should be implemented.

Keywords: Amniocentesis, genetic counselling, Invasive Prenatal Testing

[PP-030]

Successfully delivery in a patient with isolated supravulvar aortic stenosis

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Introduction: Isolated Congenital Supravulvar Aortic Stenosis (CSVAS) is a form of left ventricle outflow obstruction, which mainly located in sinotubular junction. In this case we aimed to present a successfully delivery concluded by healthy mother and newborn in 34 the week of gestation.

Case: A 23-year-old female previously diagnosed CSVAS presented for noisy and vomiting and menstrual retardation for 8 weeks. Patient was a bit anxious and describing dyspnea with NYHA class I-II and atypical chest pain. Physical examination revealed, a slim body, weak of pulses in both arms and grade 3/6-systolic ejection murmur along the right upper sternal border radiating to the right neck. Electrocardiogram and 3 months earlier obtained telecardiogram was normal. Trans thoracic echocardiography demonstrated the LVOT diameter 16 mm, aortic annulus 22 mm and a diffuse narrowing above the aortic valve (Figure 1a). Doppler study showed a peak systolic gradient of 68 mmHg and mean systolic gradient was 44 mmHg in the site of stenosis. Previously obtained contrast CT angiography demonstrated normal cardiac and aortic structures except narrowing and hourglass type of stenosis just above the aortic valves in sinotubular junction. Patient sent to gynecology and obstetric outpatient clinic and 10 weeks pregnancy with a health fetus was diagnosed. We have discussed the patient's condition in a heart team and suggested therapeutic abortion because of the high risk and severe CSVAS. But, she spoke her situation and pregnan-

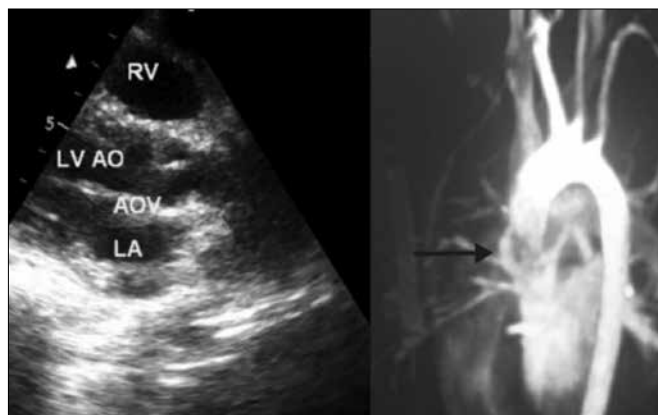


Figure 1. Aort stenosis on angiogram

cy risks with her husband and family members and she decided to continue to the pregnancy with every risks. After all, we have made a plan and gave her a strict advices list for example limitation of weight gaining below the 8 kg totally, cardiology and obstetric follow-up in every 20 days before the 25 weeks, after 25 weeks hospitalization and termination of pregnancy in 28th week. She was asymptomatic until 32 weeks and weight gain was about 8 kg, and we followed her in outpatient clinic in every week with full cardiac and obstetric examination including ECG and echocardiography. Betamethasone intramuscular injection was performed as 12-mg. Although fetal non-stress test and fetal echocardiography was normal, heart team decided to termination of the pregnancy and she had a healthy 2.150-gram baby girl with a C/S at the end of 34th week. The APGAR scores were 8 at 1 min, and 10 at 5 min. She discharged from the hospital after 3 days and one month later, she and her baby were completely healthy and asymptomatic except CSVAS. Her aortic gradient was 90/40 mmHg in the CSVAS region on control echocardiography. There was not any abnormality on echocardiography of baby. We discussed her about the future treatment and planned the stenting for CSVAS after 8 months.

Discussion: This manuscript describes a successful delivery in an isolated CSVAS patient with a close heart team follow-up. Our case is unique in the literature because we could not find any successful delivery in isolated CSVAS with severe gradient.

Keywords: Isolated Congenital Supravalvular Aortic Stenosis, pregnancy, delivery

[PP-031]

Relationship between serum asymmetric dimethyl arginine-anti-müllerian hormone levels and the pain intensity in primary dysmenorrhea

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Objective: Objective is to investigate the association of Serum Asymmetric Dimethyl Arginine, Anti-Müllerian Hormone levels with menstrual pain intensity as assessed by Visual Analogue Scale in primary dysmenorrhea patients.

Design: Cross-sectional study.

Setting: Sakarya, Turkey.

Sample: Eighty-nine female medical students with primary dysmenorrhea (PD) have been included in this study.

Material and Methods: PD pain was graded using Visual Analogue Scale (VAS), grading from 1-4 was accepted as mild, 5-7 was accepted as moderate and 8-10 was accepted as severe pain groups. Serum Asymmetric Dimethyl Arginine (ADMA), Anti-Müllerian Hormone (AMH) levels was measured. Pearson correlation and linear regression analysis were used to evaluate associations between continuous data. Categorical associations were evaluated using χ^2 test. Main outcome measures Metabolite levels and their correlation with diagnoses.

Results: ADMA and AMH levels differed significantly between VAS categories ($p=0.029$ and $p<0.001$, respectively). Similarly, AMH levels were significantly higher in moderate pain group compared to the subjects with mild pain.

Correlation analysis between serum ADMA and AMH levels in whole study group showed a highly significant positive relationship (Pearson correlation=0.978, $p=0.01$).

Conclusion: Pain intensity in PD patients is associated with the serum ADMA and AMH levels as assessed by VAS pain score. Furthermore, there is a significant positive correlation between serum ADMA and AMH levels in PD. Serum ADMA levels might have a potential to show ovarian reserve.

Keywords: Primary dysmenorrhea, pain intensity, Visual Analogue Scale, asymmetric dimethyl arginine, anti-müllerian hormone

[PP-032]

The role of genes affecting extracellular matrix for uterine leiomyoma

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Objective: In this study, we aimed to compare expression of the genes affecting uterine leiomyoma and the structure of extracellular matrix (ECM) of normal myometrial tissue.

Material and Methods: This study included 12 patients aged between 39 and 58 who underwent hysterectomy. For each patient, tissue samples of 1cm3 were collected in the hysterectomy materials from uterine leiomyoma as the study group and from the normal myometrial tissue as the control group. Gene expression of ITGA1, ITGA2, ITGA3, ITGA4, ITGAV, ITGB1, ITGB3, MMP1, MMP2, MMP9, TIMP1 and TIMP3 were evaluated in both groups. Relative changes as fold change values in gene expression were calculated by the formula $2^{-\Delta\Delta Ct}$ using $\Delta\Delta Ct$ method (threshold).

Results: Leiomyoma tissue has higher level of ITG B1, ITG B3, MMP 1, MMP 2, MMP 9 and TIMP 1 genes calculated with formula $2^{-\Delta\Delta Ct}$ using $\Delta\Delta Ct$ method (threshold), compared to the values of normal myometrial tissue. Expression of the other genes was increased in uterine leiomyoma tissue, although this increase was not statistically significant.

Table 1. The changes in expression for genes of extracellular matrix in uterine leiomyoma and normal myometrium tissue.

Genes	Gene Bank	Function	t-test p value	Fold change (Group 2/ Group 1)
ITGA1	NM_181501	Integrin, alpha 1	0.88	0.31
ITGA2	NM_002203	Integrin, alpha 2 (CD49B, alpha 2 subunit of VLA-2 receptor)	0.89	0.29
ITGA3	NM_002204	Integrin, alpha 3 (antigen CD49C, alpha 3 subunit of VLA-3 receptor)	0.76	0.21
ITGA4	NM_000885	Integrin, alpha 4 (antigen CD49D, alpha 4 subunit of VLA-4 receptor)	0.95	0.09
ITGAV	NM_002210	Integrin, alpha V (vitronectin receptor, alpha polypeptide, antigen CD51)	0.67	0.35
ITGB1	NM_002211	Integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12)	0.001	4.68
ITGB3	NM_000212	Integrin, beta 3 (platelet glycoprotein IIIa, antigen CD61)	0.001	4.11
MMP1	NM_002421	Matrix metalloproteinase 1 (interstitial collagenase)	0.0001	4.18
MMP2	NM_004530	Matrix metalloproteinase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase)	0.001	7.17
MMP9	NM_004994	Matrix metalloproteinase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase)	0.001	5.27
TIMP1	NM_003254	TIMP metalloproteinase inhibitor 1	0.001	4.89
TIMP3	NM_000362	TIMP metalloproteinase inhibitor 3	0.17	1.97

Conclusion: In pathophysiology of uterine leiomyoma, changes in the structure of ECM and overproduction are known to form the main pathology. Increase observed in the UL tissue for ITG B1, ITG B3, MMP 1, MMP 2, MMP 9 and TIMP 1 genes that influence ECM structure compared to normal myometrial tissue indicates the role of these genes in the etiopathogenesis. Treatments that will affect these gene steps may be an alternative for the medical treatment of UL.

Keywords: Uterine leiomyoma, extracellular matrix, integrin, matrix metalloproteinases

[PP-033]

The pregnancy rate of euthyroid women treated for hypothyroidism with levothyroxine in intracytoplasmic sperm injection cycles

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Objective: Infertility and menstrual disorders due to hypothyroidism is well known entity. Suggested mechanisms are alteration of peripheral estrogen metabolism, hyperprolactinemia and abnormal pulsatile release of luteinizing hormone. Nevertheless, hypothyroidism might impair natural conception, if ovulation is altered. However, there is contrary of data (Busnelli, et al. 2013 and Scoccia, et al. 2011) about pregnancy outcome in women treated for hypothyroidism before intracytoplasmic sperm injection (ICSI) cycles when compared to euthyroid women. We aim to analyze whether intra cytoplasmic sperm injection (ICSI) outcome of women with treated hypothyroidism is comparable with otherwise healthy controls.

Material and Methods: In this retrospective case-control study, a total of 56 consecutive women were identified to construct the study group who were treated for hypothyroidism before ICSI attempt between 2010 and 2016. Patients were either current (n=30) or past users (n=26) of levothyroxine, without any coexisting infertility reason, was considered to analyze. Control group was selected randomly among euthyroid women (n=100) who had undergone ICSI during the study interval (n=1605) due to unexplained infertility. Both groups were matched regarding the female age; body mass index (BMI), controlled ovarian stimulation (COS) protocol and antral follicle count (AFC).

Main results and the role of chance: The basal mean thyroid stimulation hormone (TSH) levels were comparable between study and control groups (3.49 IU/mL vs. 2.61 IU/mL, p>0.05). The mean female age, BMI, AFC and duration of infertility were also similar. The mean duration of stimulation, the total dose of FSH, the number of oocytes harvested and available embryos on Day 3 were comparable. As expected, the pregnancy rates per embryo transfer were 54.2% vs. 40.3% in the study and control groups, respectively (p>0.05). Of note, when all patients were categorized according to TSH levels, women who have higher levels than 2.5 IU/mL had the worst poor pregnancy outcome even they had normal free thyroxine hormone concentration (Table).

Conclusion: The pregnancy rate of euthyroid women who were treated or still has been treated with levothyroxine due to the past diagnosis of hypothyroidism is encouraging. However, if serum TSH level is above 2.5 IU/mL, clinical pregnancy rate is poor in ICSI cycles even they had normal free thyroxine hormone concentrations. Therefore maintaining TSH levels below 2.5 IU/mL seems to be crucial to rectify the cycle outcome.

Keywords: Hypothyroidism, icsi outcome

Table 1. The pregnancy rate according to TSH level of euthyroid women treated for hypothyroidism and control

Group of patients	Clinic pregnancy rate of TSH ≤2.5 n, %	Clinic pregnancy rate of TSH >2.6 n, %
Euthyroid women treated for hypothyroidism	17/27 (63.0%)	9/21 (42.9%)
Euthyroid control	19/39 (48.7%)	10/33 (30.3%)
p=0.026		

[PP-034]

The impact of age difference between couples on sexual dysfunction in infertile females

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Objective: The objective of this study is to evaluate the relationship between sexual dysfunction (SD) and age difference among infertile couples. We also examined the possible risk factors associated with SD.

Material and Methods: A total of 90 primary or secondary infertile patients were included in this scaled cross sectional study. SD was determined with Arizona Sexual Experience (ASEX) scale. Risk factors recorded were; age, partner age, duration of marriage, number of pregnancies, basal hormone levels, types and etiology of infertility, smoking, comorbidities, socioeconomic status, Training level, marital shape with the age difference between couples, ASEX score.

Results: The demographics and clinical characteristics of 23 (25.6%) infertile women with SD and those 67(74.4%) without SD were compared. 22 (24.6%) patients had mild SD, 59 (65.6%) patients had moderate, and 9 (10%) patients had severe CD. The age of the women ranged between 18-38 years and it was ranged between 21-45 years in men. Secondary infertility were more common among SD group (47.8% vs. 19.8%; $p=0.008$). The age difference (ranged -3 and 13) between couples statically significantly differed between the two groups (5.5 ± 2.3 vs. 3.0 ± 2.7 ; $p<0.001$). Multivariate logistic regression model showed that age difference was an independent risk factor for SD with an odds ratio of 1.430 (1.121-1.824, 95% confidence interval).

Conclusion: According to our results, the most important risk factors that cause SD among infertile couples were found to be age difference between couples. The significant threshold value was calculated as 5 years to distinguish women with SD.

Keywords: Age gap, Arizona sexual experience scale, infertility, risk factors, sexual dysfunction

Table 2. Logistic regression model for risk factors of sexual dysfunction

Factors	OR	95% CI	P
Infertility duration	1.015	0.843-1.222	0.872
Infertility type	0.477	0.064-3.560	0.470
Marriage type	0.379	0.082-1.755	0.215
Smoking	0.255	0.056-1.166	0.078
Gravidy	1.467	0.534-4.027	0.457
Training level	1.427	0.720-2.828	0.309
Age gap	1.430	1.121-1.824	0.004
OR: odds ratio; CI: confidence interval A $p<0.05$ is statistically significant.			

Table 1. Comparison of the groups according to the presence of sexual dysfunction

Variables	SD (+), n: 23	SD (-), n: 67	p
Age	27.1±6.1	26.6±4.2	0.842
Spouse age	32.7±6.7	29.6±4.4	0.065
BMI	25.1±3.1	24.6±3.1	0.572
Gravidy	0(0–3)	0(0–5)	0.025
Marriage duration	5.9±4.9	5.3±3.4	0.837
Infertility duration	4.9±4.4	4.4±2.7	0.567
Type of infertility			
Primary	12 (52.2)	54 (80.6)	0.008
Secondary	11 (47.8)	13 (19.4)	
Monthly income	1515.2±644.8	1521.4±626.5	0.970
Current smoker			
Yes	9 (39.1)	5 (7.5)	0.001
No	14 (60.9)	62 (92.5)	
ASEX score	17.8±2.9	11.4±2.8	<0.001
Age gap	5.5±2.3	3.0±2.7	0.001
Spermiogram			
Normospermi	57 (85.1)	18 (78.3)	0.460
Oligospermi	10 (14.9)	5 (21.7)	
HSG			
Unilateral occ.	1 (4,3)	2 (3)	0.237
Bilateral occ.	22 (95,6)	65 (97)	
PPS			
CS	3 (13)	4 (6)	0.692
Op LS	1 (4.3)	1 (1.5)	
Diag LS	2 (8.7)	4 (6)	
Op HS	1 (4.3)	2 (3)	
IVF history	1 (4.3)	4(6)	1.000
Comorbidities			
Hipothyroidi	2 (8.7)	2 (3)	0.734
Hiperprolactine	1 (4.3)	3 (4.5)	
Trombophilia	1 (4.3)	2 (3)	
Infertility etiology			
PCOS	9 (39.1)	36 (53.7)	0.227
Unexplained	14 (60.9)	31 (46.3)	
Employment			
Yes	4 (17.4)	6 (9)	0.270
No	19 (82.6)	61 (91)	
Trainingal level			
Illiterate	3 (13)	2 (3)	0.063
Primary	3 (13)	27 (40.3)	
Secondary	7 (30.4)	16 (23.9)	
High school	6 (26.1)	17 (25.4)	
University	4 (17.4)	5 (7.5)	
Marriage type			
Love marriage	9 (39.1)	22(32.8)	0.584
Arranged marriage	14 (60.9)	45(39.1)	
SD: sexual dysfunction; BMI: body mass index; PPS: previous pelvic surgery; IVF: invitro fertilization; HSG: hysterosalpingography; CS: cesarean section; LS: laparoscopy; HS: hysteroscopy; PCOS: polycystic ovary syndrome Data are given as mean±standard deviation, median (range), and number (percentage). A p value <0.05 is considered as statistically significant.			

[PP-035]

Cornual heterotopic pregnancy with positive fetal cardiac activity

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Introduction: Cornual heterotopic pregnancy is a very rare condition in natural conception; its incidence remains unknown[1]. We report a case of cornual heterotopic pregnancy with positive fetal cardiac pulsatility.

Case presentation: We report a case of a 41-year-old healthy multigravida who was seen in the emergency department with a diagnosis of a ruptured ectopic pregnancy. Ultrasound examination showed a well-formed intrauterine gestation without detectable fetal heart pulsation, together with a gestational sac with positive fetal cardiac rate situated in the right cornual region. Immediate surgical intervention with supportive measures resulted in a successful outcome.

Conclusion: An obstetrician should keep in mind the occurrence of a heterotopic pregnancy while dealing with pregnant females. Cornual pregnancy remains a potentially dangerous condition.. In the case of rupture, cornual resection under laparotomy remains the preferred method.

Keywords: Cornual pregnancy, heterotopic pregnancy



Figure 1. Peroperative photo

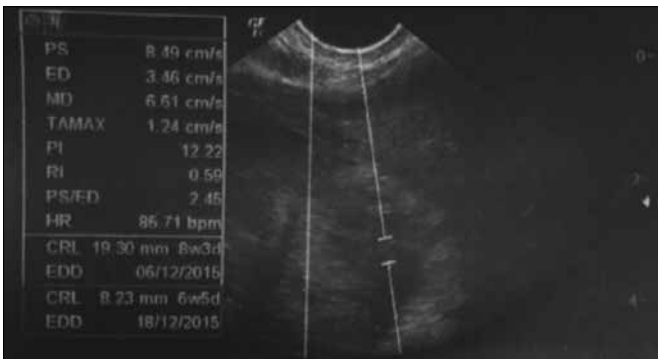


Figure 2. Ultrasound

[PP-036]

A rare cause of dyspnea in pregnancy: diaphragmatic eventration

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Figure 1. Diaphragmatic eventration of 35 week pregnancy



Figure 2. The cardiac shift was observed to retreat, but the diaphragmatic elevation remained after birth

Introduction: Diaphragmatic eventration is a permanent elevation of part or whole of the diaphragmatic leaf with no impairments in organ connections or costal region connections (1). Being mostly asymptomatic, it is often diagnosed incidentally. Alongside respiratory complaints such as dyspnea that can be progressive or can aggravate with effort, it can also involve gastrointestinal complaints including epigastric pain and swelling, and even exhibit symptoms such as palpitation. We present here our intervention to a patient who applied to our clinic at gestational week 35 with progressive dyspnea and dyspeptic complaints, and who was diagnosed with diaphragmatic eventration and administered cesarean delivery.

Case Presentation: A 33-year-old G2P1 lady at her gestational week 35 presented to our outpatient clinic complaining about severe dyspnea that had started at the 3rd Trimester of her pregnancy and progressed with increasing severity. She stated in her medical history that she had dyspeptic complaints persisting for years, but her first pregnancy had been totally normal. No pathology was encountered in her systemic and obstetric examinations. She was proposed outpatient monitoring with check-ups if her complaints continued. However, she presented once more about a week later as her respiratory difficulties worsened. Her physical examination showed subcostal retractions during inspiration. After the patient was given necessary information and her consent was obtained, her posteroanterior chest x-ray was taken with a lead vest to protect the baby. An elevation of approximately 4 cm in the left diaphragm, a rightward shift in the trachea and a right-sided deviation in the heart were seen in her radiography (Figure 1).

This made us think of a diaphragmatic eventration. The patient was asked to bring in a previously taken chest x-ray, but she said that she had not her chest x-ray taken before. Since her gestation weeks expired and her complaints increased, we thought that a spontaneous vaginal delivery would worsen her present condition and decided to administer a cesarean delivery. Her respiration complaints receded partially after birth, but her dyspeptic complaints remained. On her follow-up x-ray, the cardiac shift was observed to retreat, but the diaphragmatic elevation remained (Figure 2). Her respiratory function test showed a restrictive disorder (Figure 3).

The patient was proposed a restoration of her diaphragm.

Discussion: In conclusion, diaphragmatic eventration in pregnancy is a condition that is difficult to diagnose with its non-specific symptoms and that should be addressed promptly due to its potential complications. Diaphragmatic eventration should be considered after obstetric causes are ruled out in patients who present with non-specific symptoms no matter what their gestational week is. The treatment approach should be multidisciplinary involving gynecologists, obstetricians, pediatricians and pulmonologists, as well as specialists from other branches when necessary. Medicolegal responsibility calls for providing the family with proper information on possible maternal and fetal complications and obtaining their consent and then deciding on a delivery and diaphragmatic repair under optimum conditions.

Keywords: Diaphragmatic eventration, dyspnea, pregnancy

[PP-037]

The impact of obesity on semen parameters and hormone levels in infertile men

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Objective: Previous studies in overweight men have shown an increased likelihood of abnormal semen parameters, and obesity has been found to be associated with male subfertility. In this study we aimed to investigate the effect of obesity on semen parameters and hormone levels in infertile males.

Material and Methods: This was a prospective cross-sectional study designed to assess the influence of obesity on semen parameters and hormone levels in infertile men. 88 obese [Body mass index (BMI) ≥ 30 kg/m²] men and 169 non-obese (BMI < 30 kg/m²) men were eligible for the study. All semen samples were obtained by masturbation after 3 days of sexual abstinence. After liquefaction at room temperature, semen volume, sperm concentration, motility, and normal morphology were determined according to World Health Organization (WHO, 2010) guidelines for semen analysis. Serum hormone levels were measured on the same-day with semen analysis.

Results: Semen volume was significantly lower in the obese group than in the non-obese group. No significant differences were observed between the groups in term of other semen parameters. Mean serum total testosterone (TT) level and TT/estradiol (E2) ratio were significantly higher in the non-obese group, whereas mean E2 level was significantly higher in the obese group. There was a significant positive correlation between BMI and E2 levels in the obese group.

Table 1. Comparison of demographics and clinical characteristics of the patients

Variables	Obese group BMI ≥ 30 kg/m ² (n=88)	Non-obese group BMI < 30 kg/m ² (n=169)	p value
Age	31.1 \pm 4.0	30.1 \pm 4.5	0.070
BMI	34.5 \pm 4.4	24.5 \pm 2.8	0.000
Spouse age	28.4 \pm 4.5	26.3 \pm 5.1	0.001
Marriage duration	4.1 \pm 3.0	3.9 \pm 3.2	0.430
Smoker, n (%)	43 (48.9)	85 (50.3)	0.828
Infertility type, n (%)			0.114
Primary	76 (86.4)	156 (92.3)	
Secondary	12 (13.6)	13 (7.7)	
Live children	0 (0-1)	0 (0-3)	0.139
IUI cycles, n (%)			0.320
1	7 (8)	17 (10.1)	
2	4 (4.5)	12 (7.1)	
3	3 (3.4)	4 (4.3)	
IVF, n (%)			0.579
1	7 (8)	18 (7)	
2	2 (2.2)	2 (2.1)	
Grade 1 varicocele	8 (9.1)	29 (17.2)	0.080
Previous Urologic Surgery			0.268
Orchiopexy	4 (4.5)	2 (1.2)	
Spermatic vein ligation	10 (11.4)	27 (16)	
Inguinal hernia	3 (3.4)	8 (4.7)	

Table 2. Serum hormone levels according to the presence of obesity

Variables	Obese group (n=88)	Non-obese group (n=169)	p
FSH	5.6±4.5	7.2±9.2	0.760
LH	4.7±3.1	5.7±5.6	0.373
Total testosterone	321.3±130.8	455.0±174.7	0.000
Estradiol	27.8±12.8	22.2±7.3	0.000
TT/E2	13.1±6.0	23.1±13.7	0.000
Prolactin	8.6±3.3	8.8±3.7	0.999
TSH	2.0±2.2	1.9±1.7	0.523
Free T3	3.6±0.4	3.5±0.4	0.499
Free T4	1.1±0.3	1.1±0.2	0.311

Table 3. Comparison between semen parameters in the two groups

Variables	Obese group (n=88)	Non-obese group (n=169)	p value
Sperm volume	2.1±1.4	2.5±1.4	0.018
pH	8.0 (7.0-8.0)	8.0 (7.0-8.5)	0.677
Liquefactions, n (%)	8 (9.1)	17 (10.1)	0.804
Leukocyte, n (%)	6 (6.8)	24 (14.2)	0.080
Sperm count	36.9±40.5	35.6±38±8	0.916
Concentration	19.7±25.0	16.1±24.5	0.417
Progressively motility	28.6±20.3	23.9±18.6	0.060
Postwash sperm count	17.2±18.0	19.1±19.5	0.504
Postwash progressively motility	64.4±40.2	68.3±39.5	0.238
Kruger	4.4±3.5	4.0±3.2	0.547
TPMSC	15.3±17.3	18.2±19.8	0.405
Sperm count <39 mil, n (%)	54 (61.4)	112 (66.3)	0.436
Sperm volume <1.5 cc, n (%)	27 (30.7)	30 (17.8)	0.018
Concentration <15 mil/cc, n (%)	56 (63.6)	119 (70.4)	0.269
Motility <32%, n (%)	42 (47.7)	97 (57.4)	0.140
Kruger <4%, n (%)	46 (52.3)	81 (47.9)	0.509
Azoospermia, n (%)	20 (22.7)	32 (18.9)	0.473

A significant inverse correlation was observed between BMI and TT levels in the non-obese group.

Conclusion: Obesity may reduce semen volume in infertile males. This effect may be due to the changes in sex hormone levels. However, it has no impact on more meaningful indicators of male fertility such as sperm concentration, motility, and morphology.

Keywords: Male infertility, obesity, semen volume, sex steroids, sperm parameters

[PP-038]

Hematocolpometra due to imperforate hymen in an adolescent girl: A case report

**Figure 1. Ultrasonographic image of the hematometrometra**

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Introduction: Imperforate hymen is a rare condition among adolescent girls that presents with primary amenorrhea and cyclic lower abdominal pain. In this condition the hymenal membrane occludes the vaginal orifice, thus resulting in hematometrometra. The prevalence of imperforate hymen was reported between 0.1% and 0.01%. Here in, we reported a case of imperforate hymen, presented with haematocolpometra.

Case Presentation: A 15-year-old adolescent girl was referred to the gynecology outpatient clinic by a pediatrician, because of determining a pelvic mass in ultrasonography (USG). She was suffering from lower abdominal pain since approximately last twelve months, and she was complaining that the pain increased in recent months. She was stated that she had never seen menstrual bleeding so far. Systemic examination was performed and axillary hair was observed. Secondary sexual characteristics were compatible as Tanner stage 3 breast development and pubic hair growth. Genital examination showed that the hymen was tense, bulging outside but there was no opening on the hymen. Fluid collection was determined, in the vagina and in the uterine cavity by suprapubic ultrasound (Figure 1). She underwent hymenotomy using simple cruciate incision for creating a vaginal outflow. The hematometrometra and the hematocolpos spontaneously drained after the incision. She was discharged the next day with healing. Postoperative follow-up was uneventful.

Conclusion: Imperforate hymen is relatively a rare anomaly of the reproductive tract, but it is the most common obstructive anomaly of the female reproductive tract. Delayed menarche in the presence of secondary sexual characteristics and cyclic abdominal pain gradually increasing over months are the typical findings for this condition. With our case, we wanted to take attention to this anomaly which can simply be diagnosed by history and physical examination.

Keywords: Primer amenorrhea, imperforate hymen, hematometrometra, adolescent girls

[PP-039]

Omental splenosis mimicking hemangioma: A case report

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Introduction: Splenosis is a condition in which splenic tissue is found in the peritoneal cavity or in other unusual locations owing to heterotopic auto-transplantation and implantation of splenic tissue following spleen trauma or splenectomy. Usually, the splenic implants are located within the peritoneal cavity; however, it can be found in extra-abdominal locations such as thorax and subcutaneous tissues. The implants are benign and are incidental findings at autopsy or at abdominal operations, however they are often misdiagnosed as a tumor. The differential diagnosis includes hemangiomas, endometriosis and metastatic cancers. Herein we wanted to present a case of splenosis which was recognized incidentally during cesarean section (C/S) and was misdiagnosed as a hemangioma during surgery.

Case Presentation: A 26-year-old multiparous pregnant woman with 38 2/7 weeks of pregnancy was admitted to the clinic owing to pelvic pain. She had a history of splenectomy operation when she was eight years old, and two C/S surgeries two and five years ago. This pregnancy was uneventful. Upon admission, she had regular contractions; the fetus was in foot presentation. Urgent C/S with bilateral tubal ligation was performed and a 3190 g male infant with 1st and 5th minute APGAR scores of 9 and 10 was delivered. During the surgery, we incidentally observed a reddish mass in omentum of 4.5x4.5x3.5 cm in size resembling a hemangioma (Figure 1). We excised it with a small amount of omental tissue around. She had an uneventful postoperative follow-up and she was discharged on day two after surgery. Histopathological diagnosis of the excised mass was reported as splenic tissue.

Conclusion: Splenosis means that small pieces of splenic fragments implant into other sites randomly, then grow and form small spleens which have the physical function similar to normal splenic tissue. The

Incidence of splenosis in patients who underwent splenectomy after trauma was reported as up to 76 %. These heterotopic tissues function like a spleen in splenectomized patients so they don't need to be removed. Since diagnosis cannot be made just by their appearance, since a malignancy cannot be excluded and since they may lead to intraabdominal bleeding that may necessitate further surgery, removal is considered in intraoperatively detected cases like ours.

Keywords: Splenosis, omental mass, misdiagnosis of splenosis

[PP-040]

Spontaneous uterine rupture in second trimester without labor: A case report

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Introduction: Uterine rupture is an obstetrical emergency with a high risk of maternal/fetal morbidity/mortality. Most important risk factor is previous cesarean section (CS) or transmyometrial uterine surgery and most of the ruptures occur during labor. Spontaneous uterine rupture (SUR) that occurs in the absence of labor may also be due to uterine scars but these rather occur as a result of trauma or as cornual or rudimentary horn pregnancy ruptures. We want to present a case of 2nd trimester spontaneous fundal uterine rupture in a patient with previous CS and pregnancy termination history.

Case presentation: A 36 year old G3P1A1Y1, 236/7 weeks of pregnant woman was admitted to the emergency room with nausea, vomiting and abdominal pain. She had a CS for fetal distress 7 years ago. Her 2nd pregnancy which was obtained after clomiphene citrate stimulation+intrauterine insemination (IUI) was terminated because of anencephaly. She had nephrolithiasis and a history of ureteroscopic stone removal. This pregnancy was obtained after gonadotropin induction+IUI. Obstetric ultrasound 3 days ago showed fundal placental localization, normal amniotic fluid volume, normal fetal biometry and anatomy. At admission, she was uncomfortable with a 110/70 mmHg blood pressure, 110 beats/min pulse, 16/min respiration rate and 36.7°C body temperature. Speculum and digital cervical examinations were normal. Emergent obstetric ultrasound showed a fetal heart rate of 110 beats/min, normal amniotic fluid volume and placenta. The uterus had a normal tonus with no contractions by palpation. But lower abdominal pain was present in admission. Laboratory results were: hemoglobin (Hg): 8.34g/dL, albumin: 2.6g/dL and +1 protein in spot urine. She had a hemoglobin value of 10.7g/dL one month ago. She declined the abdominal X ray wanted by the general surgeons to exclude gastrointestinal perforation. Repeat abdominal ultrasound 3 hours later showed diffuse free fluid in the abdomen. She was paler and colder compared to admission, her pain was worse, repeat hemoglobin value was 7.3g/dL, fetal bradycardia developed and emergent laparotomy was decided for a possible gastric perforation or uterine rupture. Under general anesthesia, a supraumbilical median incision was performed. There was about two liters of blood in the abdominal cavity and an actively bleeding 3x4 cm of rupture area at the uterine fundus. A 460 grams of ex fetus was delivered through a classical uterine incision by entering the uterus through elongation of the rupture area. The rupture area was sutured in 3 layers. A total



Figure 1. Omental splenosis tissue which was considered as a hemangioma

of 5 units of packed erythrocytes were transfused during the intra and postoperative period. She had an uneventful postoperative course and was discharged on the second postoperative day after being informed about the possible future pregnancy complications.

Conclusion: Spontaneous uterine ruptures may occur in scarred or unscarred uteruses due to trauma, rudimentary horn pregnancy or cornual ectopic pregnancies. It may also occur in the absence of these conditions. In patients presenting with acute abdominal pain in the 2nd or 3rd trimester, uterine rupture should be considered in the differential diagnosis even if the patient is not in labor or does not have any risk factor for rupture.

Keywords: Spontaneous uterine rupture, second trimester uterine rupture, maternal morbidity, fetal mortality

[PP-041]

Does increasing number of pregnancies affect pelvic floor dysfunction symptoms in reproductive aged women?

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Objective: We formed a homogenous sample of women who never had labor or vaginal deliveries, but experienced at least 1 pregnancy and we investigated pelvic floor disorders via questionnaires. We aimed to demonstrate a possible effect of pregnancies, distinct from labor, on pelvic floor dysfunction. We searched for any association of pelvic floor dysfunction with number of pregnancies for this reason; with BMI and birth weight of newborn as they may be related to force chronically acting on pelvic floor; smoking, age at first C/S and years passed after last C/S as they may effect connective tissue strength and healing.

Material and Methods: Hospital data base was searched for the patients who had Cesarean section(s) for any indication between 37-42. weeks of gestation before labor started and had no previous vaginal deliveries. Patients who had any sign of labor or regular uterine contractions before any of her Cesarean section(s), patients with multiple pregnancy, history of pelvic surgery or medical diseases, post-

Table 1. Correlation analyses of some variables with PFD-20 components

		UDI-6				POPDI-6	CARDI-8
		Irritativ	Stress	OBSTR	Total		
Years after last C/S*	<1 year	16.6 (0-100)	0 (0-100)	0 (0-100)	11.1 (0-88.8)	11.1 (0-88.8)	8.3 (0-70.8)
	>2 year	16.6 (0-100)	0 (0-100)	0 (0-100)	11.1 (0-100)	5.5 (0-100)	8.3 (0-91.6)
	P	0.77	0.54	0.18	0.78	0.17	0.40
BMI**	<25	0 (0-100)	0 (0-100)	0 (0-100)	5.5 (0-100)	5.5 (0-100)	8.3 (0-91.6)
	25-30	16.6 (0-100)	0 (0-100)	0 (0-100)	5.5 (0-88.8)	5.5 (0-61.1)	8.3 (0-70.8)
	>30	16.6 (0-100)	0 (0-100)	16.6 (0-83.3)	11.1 (0-94.4)	11 (0-77.7)	12.5 (0-77)
	p	0.19	0.19	0.08	0.14	0.14	0.14
Smoking*	Yes	16.6 (0-100)	0 (0-100)	0 (0-83.3)	11.1 (0-83.3)	11.1 (0-88.8)	8.3 (0-70.8)
	No	16.6 (0-100)	0 (0-100)	0 (0-100)	5.5 (0-100)	5.5 (0-100)	8.3 (0-91.6)
	p	0.91	0.78	0.64	0.81	0.4	0.92
Birth weight of the newborn	1500-2500	00 (0-83.3)	0 (0-66.7)	0 (0-83.3)	2.7 (0-77.7)	2.7 (0-44.4)	8.3 (0-54.1)
	2500-3500	16.60 (0-100)	0 (0-100)	00 (0-100)	11.1 (0-100)	11.10 (0-100)	12.5 (0.91)
	3500-4500	16.60 (0-100)	00 (0-100)	00 (0-100)	11.10 (0-88.8)	5.50 (0-72.2)	8.30 (0-70)
	>4500	0 (0-33.3)	16.60 (0-33.3)	16.60 (0-33.3)	11.1 (0-44.4)	11.10 (0-38.8)	20.80 (0-37)
	p	0.09	0.54	0.9	0.36	0.04	0.18
Number of C/Ss*	1	16.60 (0-100)	0 (0-100)	0 (0-100)	11.10 (0-100)	11.10 (0-100)	8.30 (0-91)
	>2	00 (0-100)	00 (0-100)	00 (0-83.3)	5.50 (0-88.8)	5.50 (0-77.7)	8.30 (0-75)
	p	0.47	0.35	0.34	0.19	0.22	0.38
Age at first C/S***	rr	-0.19	0.37	0.04	0	-0.5	0.01
	p	0.66	0.39	0.35	0.99	0.24	0.7

*Mann-Whitney u test

**Kruskal-Wallis test

***Sperman's rho correlation test

menopausal women, and patients younger than 18 and older than 50 years of age were excluded. We reached enrolled patients either via telephone or e-mail, checked for the exclusion criteria, and asked to answer Turkish version of the Pelvic Floor Distress Inventory -20 (PFD-20), a questionnaire assessing urinary incontinence in 6 (UDI-6), pelvic organ prolapsus in 6 (POPDI-6), and bowel functions in 8 (CRADI-8) questions, after their informed consents were obtained. Any possible association of 6 variables (years passed after last C/S, BMI, smoking, birth weight of the newborn, number of C/Ss, age at first C/S) with all components of PFD-20 were tested using data from all enrolled women. 385 women had one, 156 women had two, 17 women had 3, 5 women had 4, and 1 woman had 5 C/Ss. Patients were grouped into 2 according to number of Cesarean section(s) they had: patients with history of only one elective Cesarean section constituted Group 1 and patients with history of 2 or more Cesarean sections constituted Group 2.

Results: Median age and BMI are higher and median age at first C/S is 2 years lower than Group 1 in Group 2. Total PFDI-20 scores were statistically similar in both groups. Results of correlation analyses between 6 variables (years passed after last C/S, BMI, smoking, birth weight of the newborn, number of C/Ss, age at first C/S) and PFDI-20 components are shown in Table 2. Among tested variables, the only significant correlation was between birth weight of the newborn and POPDI-6 score ($p: 0.04$) (Table 1).

Conclusion: Increasing number of pregnancies doesn't increase PFDI-20 scores in reproductive aged women when route of delivery is elective Cesarean section. Increasing birth weight of the newborn is correlated with high POPDI-6 scores. Other tested variables doesn't seem to be associated with PFD related complaints in reproductive aged women.

Keywords: Cesarean, delivery, incontinence, labor, pelvic

[PP-042]

Management of a pregnancy in the absence of rectus muscles: A case report

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Introduction: Anteromedial abdominal wall has important functions in respiration, posture, trunkal and pelvic stability and supporting of the abdominal viscera either in pregnant or non-pregnant women. Abdominal muscles consist of the rectus abdominis, external-internal abdominal oblique and transverse muscles. Weakness or absence of abdominal muscles will make the uterus and abdominal organs unprotected against injury. Here in we wanted to present the management of a pregnancy in a woman who had previously lost part of her anterior abdominal muscles as a result of gun shut injury.

Case Presentation: A 35-year-old primigravid woman was admitted to the outpatient clinic with 7 weeks of pregnancy. She gave a history of major abdominal surgery due to a gun shut injury 11 years ago in which her spleen and rectus muscles were removed owing to irreparable damage. The defect was closed by a skin graft taken from the thigh. She had type 2 diabetes for two years and HCV antibody positivity since 15 months. Abdominal examination revealed a 20×20 cm



Figure 1. Small bowel with visible movements were protruding from abdominal defect

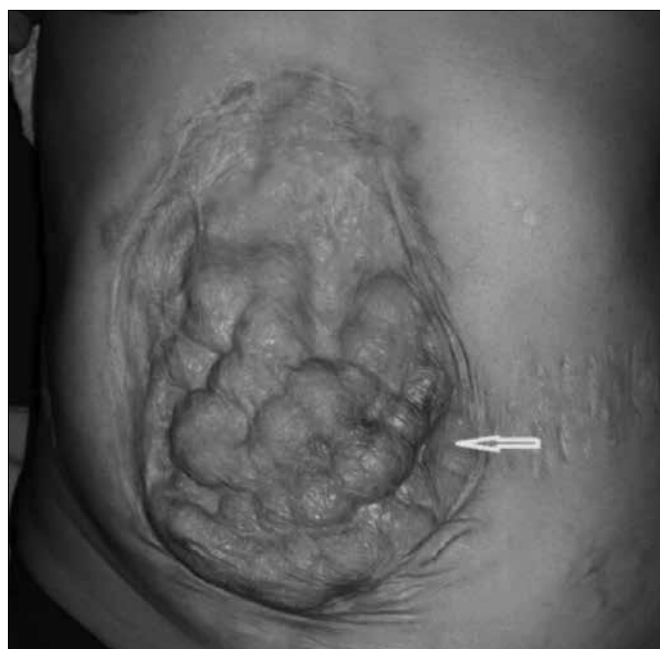


Figure 2. Healed necrotic area after 18 months from the cesarean section

muscular defect in the anterior abdominal wall. Rectus muscle was absent totally at the right side and partially at the left side. Loops of small bowel with visible movements were protruding from this defect to the outside (Figure 1). We advised her to support the abdomen by a corset in advancing gestational weeks. General surgeons did not plan any surgical intervention during pregnancy. During follow up, because of the increased tension with increasing gestational age, left upper corner of the skin covering the defect started to get thinner, gradually changed color and eventually developed necrosis. Bowel loops were adherent to the covering skin so they continued to stay anterior to the uterus in spite of increasing gestational age. At the 33rd gestational week, a 1 cm sized defect developed at this necrotic area through which the adherent small intestine was visible. We sutured the defect and applied skin dressings with Furacin Pomad (2% Sodyum Fusidat;

Abdi İbrahim, İstanbul, Turkey). Cesarean section was performed through a pfannenstiell incision at 352/7 gestational week since persistent tension led to enlargement of the skin necrosis (Photo 2) and redevelopment of a skin defect. A female baby was delivered with spinal anesthesia. APGAR scores were 7-9 at 1 and 5 minutes and birth weight was 3150 g. The necrotic skin was removed and the defect was closed during surgery. She was discharged with healing two days after the surgery.

Conclusion: If the rectus muscles of a pregnant woman are absent as in our case, increased intraabdominal tension with advancing gestation may cause a rupture of the abdominal wall exposing the intraabdominal contents to outside. Displacement of bowel loops to superior and posterior abdomen which occurs in normal pregnant may not occur in a case like our's, due to postsurgical adhesions. This may increase the risk of intestinal injury in case of any abdominal trauma during pregnancy. It also necessitates care of underlying intestines in case of rupture. Early delivery may be necessary if such complications occur.

Keywords: Anterior abdominal muscles, absence of abdominal muscles, pregnancy

[PP-043]

Direct inguinal hernia containing the fallopian tube and ovary in a patient with unicornuate uterus: A case report

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Objective: Inguinal hernia is relatively uncommon in females; it affects males 10 times more frequently. Lifetime prevalence is 20% in males and 2% in females. Its incidence in pregnancy has been reported as 1/1000. Inguinal hernias may be direct or indirect depending on their locations; 'indirect' if located superior to the inguinal ligament and lateral to the inferior epigastric artery or 'direct' if located superior to the inguinal ligament and medial to the inferior epigastric artery. Almost all inguinal hernias in females occur as indirect inguinal hernias and direct inguinal hernias in females are unusual. In this report, we describe the case of a 27-year-old female primigravid patient with an incidentally detected left direct inguinal hernia during cesarean section; the left fallopian tube and left ovary were contained within the hernial sac.

Case: A 27 year old primigravid patient at 382/7 weeks of gestation was admitted to the clinic in labor. She was 145 cm tall. During follow up cesarean section was performed because of the lack of labor progress. A female baby with a birth weight of 2725 g was delivered. APGAR scores were 9 and 10 at the 1st and 5th minutes. The uterine shape was consistent with a unicornuate uterus and a rudimentary horn. Pregnancy was developed on the right horn; left fallopian tube and left ovary were observed in a left inguinal hernia sac. Left fallopian tube and ovary could become visible after pulling them out of the hernial sac (Figure 1 a-d). A general surgeon was invited to the operation. Direct inguinal hernia was detected on the left side and

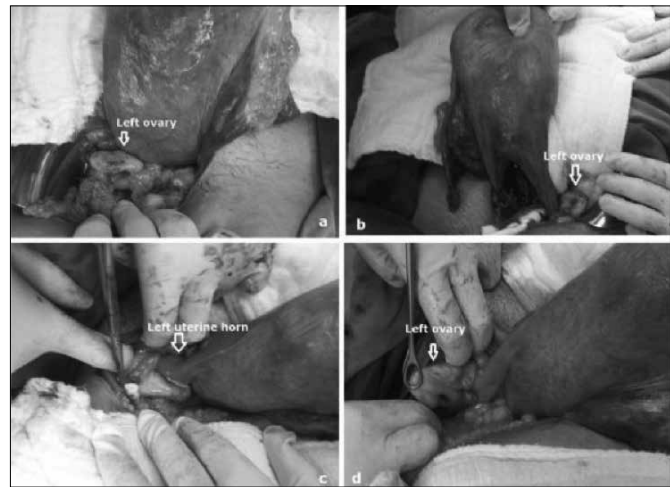


Figure 1. The right uterine horn with rudimentary left horn, left fallopian tube and ovary after pulling them out of the hernial sac

it was then repaired with Lichtenstein procedure by using a 3x6 cm sized polypropylene monofilament mesh (vizicare; İstanbul, Turkey). The mother was discharged with her baby on the second postoperative day.

Conclusion: The inferior location of the left ovary and the left fallopian tube because of the müllerian abnormality present in the patient and the weakness that occurred in the transversalis fascia during pregnancy may have predisposed to the development of direct inguinal hernia in our patient. Although direct inguinal hernias are rarer than the indirect ones, factors decreasing the tissue support such as increased intraabdominal tension may increase the risk. Inguinal hernias mostly contain bowel loops; herniation of reproductive organs occurs very rarely and generally at earlier ages. However, herniation of the fallopian tube and ovaries should also be considered in women with several müllerian abnormalities even at adulthood.

Keywords: Direct inguinal hernia, fallopian tube and ovary herniation, pregnancy

[PP-044]

Isolated fallopian tube torsion

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Isolated tubal torsion is a rare gynecologic emergency. It is quite difficult to make the diagnosis preoperatively, because there is no symptom and imaging technique specific to the disease. Usually diagnosis is established during surgical intervention. 45 year old female patient presented to our unit with sudden onset pain localized to right suprapubic region. She had a history of tubal ligation 15 years ago and right oophorectomy performed by general surgeons during appendectomy 7 months ago. Ultrasonography revealed dilated tortuous mass on the right adnexal region. The patient underwent prompt surgical intervention due to her worsening clinical condition with an initial di-

agnosis of tubal torsion. Right tubal torsion was observed. Because of no fertility desire salphengectomy was performed.

Keywords: Fallopian tube diseases, salpingectomy, tubal ligation

[PP-045]

A rare postpartum complication of severe preeclampsia: Massive ascites and pleural effusion

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Pre-eclampsia is defined as new onset hypertension and proteinuria after 20 weeks of gestation and complicates approximately 2-8% of all pregnancies. Release of vasoconstructive agents, endothelial damage, hyperpermeability of the capillaries and microangiopathic hemolysis involves the basic pathophysiology. Here we report a case of severe preeclampsia who developed postpartum massive ascites and pleural effusion. A 27-year-old primigravida patient was referred to our clinic with severe preeclampsia at 35 weeks of gestation. An emergency cesarean section was performed. On the second postoperative day she had abdominal distension and severe abdominal pain. On the third postoperative day patient's abdominal distension was increased and USG revealed massive ascites and computed tomography showed bilateral pleural effusion. Abdominal drainage was performed and albumine infusion was administered. Approximately 3000 cc serous fluid was drained. Her complaints were regressed on the following days and on postoperative day 7 and she was discharged on postoperative day 10. Postpartum development of massive ascites and pleural effusion in severe preeclampsia is a rare event and there is very limited number of reports in literature.

Keywords: Pleural effusion, peritoneal effusion, pre-eclampsia

[PP-046]

The necessity of colposcopy in cervical intraepithelial lesions

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Objective: To investigate the diagnostic accuracy of colposcopy who had applied to our polyclinic with abnormal pap smear.

Material and Methods: This was a prospective trial involving 80 patients who had an abnormal pap smear. This study involves 80 patient who attend to Mustafa Kemal University Obstetric and Gynecology polyclinic with abnormal smear between January 2009 and January 2010.

After the approval of patients, first a colposcopic examination and

than colposcopy induced biopsy was performed. To all patients endocervical and endometrial curettage were performed. Patient data was calculated with SPSS-13.0 for statistical analyzes.

Results: 80 patients consisted of 38 (47.5%) ASCUS, 21 (26.3%) ASC-H, 7 (8.8%) LSIL, 12 (15%) HSIL, 2 (2.5%) AGNOS. After the colposcopic examination, colposcopy of 33 (41.3%) patients is normal, 47 (58.8%) patients is pathologic. We performed colposcopy induced biopsy. When we evaluated the outcomes; 16 patients results is normal. 26 patients pathology is cervicitis, erosion, 3 patients coilositotic findings and 35 patients outcome pathologic (LSIL, HSIL, SCC).

Colposcopy showed a sensitivity 85.7%, specificity 62.6%, positive predictive value (PPV) 63.8%, negative predictive value (NPV) 84.8% in cervical premalign lesions.

Conclusion: Colposcopy has made major contributions by reducing the number of blinded four quadrant biopsies, unnecessary conizations and invasive surgical procedures. Colposcopy induced biopsy is the gold standard in cervical premalign lesions. On the other hand, colposcopy is considered a subjective procedure that is highly dependent on observer evaluation. Eventually, by review of cytologic, colposcopy and histopathologic data together the most true approach is done for the patient.

Keywords: Cervical premalign lesion, colposcopy, histopathology

[PP-047]

Effect of endometrioma on infertility

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Objective: Endometriosis is gynecologic disease which has high prevalence among infertile population. Cystic appearance of endometriosis in ovary is named as endometrioma. Ultrasonography helps to diagnose the disease when endometrioma cysts are formed. In this study we aimed to investigate the effect of endometrioma on infertility treatment.

Patients Interventions: 242 ovulatory cycles of 60 patients admitting to Kanuni Sultan Süleyman Training and Research Hospital has been examined. In this study ovulatory reaction and size of the endometrioma of unilateral endometrioma patient as well as the ovulatory reaction of contralateral non-endometrioma over is examined depending on the changed induction agent.

Results: The average age of 60 unilateral endometrioma patients admitting to our clinic was 27.6; having average BMI of 24. 66.7% of those patient had dismenore and 36.7% (n: 22) had disparone complaints. Endometrioma was seen 50% (n: 30) on the right and 50% (n: 30) on the left. The size of the endometrioma was <3 cm for 46.7% (n: 28) and >3cm for 53.3% (n: 32). Average CA 125 level was 39.09±20.8 (U/mL)

Patients were followed for 4 cycles where 1.47±0.94 ovulation were on the over with endometrioma and 2.62±1.42 was on the non-endometrioma over. Average ovulation was 1.46±0.9 on the over with endometrioma <3 cm; whereas for the over with >3 cm endometrioma the average ovulation was 1.48 ±0.87.

In all patients, through the 4 cycles the ovulation on the over with endometrioma was significantly different ($p>0.05$) than the ovulation on the non-endometrioma over. Ovulation on the over with endometrioma <3 cm was significantly different ($p>0.05$) than the ovulation on the non-endometrioma over. Ovulation on the over with endometrioma >3 cm was significantly different ($p>0.05$) than the ovulation on the non-endometrioma over.

Conclusion: In the literature studies show that existence of endometrioma adversely effect the ovulation mechanism of an over. We have observed similar results in our studies.

Keywords: Endometrioma, endometrioma surgery, infertility

[PP-048]

Effect of endometrioma surgery on infertility treatment

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Objective: Endometriosis is gynecologic disease which has high prevalence among infertile population. Cystic appearance of endometriosis in ovary is named as endometrioma. Ultrasonography helps to diagnose the disease when endometrioma cysts are formed.

It has been reported in various studies that when fertility is the case, endometrioma cyst and its curative surgical operations can reduce the over reserve. In this study we aimed to investigate the effect of endometrioma operations on infertility treatment.

Patients Interventions: 19 patients and 78 ovulatory cycles at Kanuni Sultan Süleyman Training and Research Hospital Infertility Clinic are examined. In this study ovulatory reaction and size of the operated endometrioma of unilaterally operated endometrioma patient as well as the ovulatory reaction of contralateral non-endometrioma over is examined depending on the changed inducing agent.

Results: The average age of 19 endometrioma operated patients was 27.66 ± 2.04 ; having average BMI of 24.1 ± 3.33 . Endometrioma operations took place on the right over for 47.4% and on the left over for 52.6% of the patients. The size of the endometrioma cyst was >5 cm for 63.2% of the patients $3 < x < 5$ cm for 36.8% of the patients.

4 ovulatory cycles were followed for 19 endometrioma operated patients that are used for this study. 2.53 ± 1.28 of ovulation took place on the contralateral intact over whereas 1.58 ± 0.68 of ovulation took place on the endometrioma operated over. The size of the endometrioma cyst excised during the operation did not affect the ovulation ratio on the operated over.

Ovulation rate of the endometrioma operated over was significantly ($p<0.05$) lower than the ovulation rate of the contralateral unoperated over. Ovulation rate of the endometrioma operated over with cyst size of $3 < x < 5$ cm was significantly ($p<0.05$) lower than the ovulation rate of the contralateral unoperated over. Ovulation rate of the endometrioma operated over with cyst size of $5 \text{ cm} \leq x$ was significantly ($p<0.05$) lower than the ovulation rate of the contralateral unoperated over.

Conclusion: In the literature studies show that endometrioma operations adversely effect the over reserve. We have observed similar results in our studies.

Keywords: Endometrioma, endometrioma surgery, infertility

[PP-049]

Effect of endometrioma and its curative surgical operations on infertility treatment

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Objective: It has been reported in various studies that when fertility is the case, endometrioma cyst and its curative surgeries can reduce the over reserve. In this study we aimed to investigate the effect of endometrioma and its curative surgical operations on infertility treatment.

Patients Interventions: 44 patients and 44 ovulatory cycles at Kanuni Sultan Süleyman Training and Research Hospital are investigated. In this study level of gonadotrophyn used on the cycles of patients who are operated for endometrioma are compared against unoperated patients.

Results: In our study 20 out of 44 patients who are treated with gonadotropin had endometrioma and the rest of 24 were already operated. The average age of the patients with endometrioma was 30.1; having BMI: 23.7; average number of antral follicul: 4.10-4.05; average FSH 6.65; average LH 6.25; average amount of gonadotrophin 467.6. Contrarily, 24 endometrioma operated patients, the average age was 28.4; having BMI 24.6; average number of antral follicul: 3.60-3.68; average FSH 6.33; average LH 5.17; average amount of gonadotrophin 525.5 U. The average size of endometrioma cysts of 20 unoperated patients were smaller than 3 cm for 45% (n: 9) and between 3-5 cm for 55% (n: 11) of them. The average size of endometrioma cysts of 24 operated patients were between 3-5 cm for 33.3% (n: 8) and larger than 5 cm for 66.7% (n: 16) of them.

Patients who had endometrioma operation and treated with Gonadotropin had significant ($p<0.05$) younger age than unoperated patients with endometrioma. BMI, side preference, number of follicles on right or left, FHS values, E2 values, and amount of gonadotrophin used for induction were not significantly ($p<0.05$) different.

The average antral follicul number (M3) (right-left) of the 20 patients who were induced with gonadotrophin was 3.78-4.44 for 9 patients who had endometrioma size <3 cm; whereas for the rest of 11 patients with endometrioma size between 3-5 cm, the average antral follicul number (M3) (right-left) was 3.36-3.73. The amount of gonadotrophin used for 9 patients with endometrioma size <3 was 455 U; and for 1 patients who had endometrioma size $3 < x < 5$ cm, the amount of gonadotrophin was 481 U.

Difference in the age, BMI, side preference, number of follicule on the right over, FSH value, TSH value, progesteron level and the amount of

gonadotrophin used for induction was not significant ($p>0.05$) for the patients with endometrioma size <3 and $3<x<5$.

The average antral follicul number (M3) (right-left) of the 24 patients who were operated and induced with gonadotrophin was 3.70-4.10 for 8 patients who had endometrioma size $3<x<5$ cm; whereas for the rest of 16 patients with endometrioma size between >5 cm, the average antral follicul number (M3) (right-left) was 3.38-3.45. The amount of gonadotrophin used for 8 patients with endometrioma size $3<x<5$ cm was 476 U; and for 16 patients who had endometrioma size between >5 cm, the amount of gonadotrophin was 550 U.

Conclusion: In the literature studies, it is found that endometrioma operations adversely effect the over reserve and the amount of Gn for inducing the ovulation increases for the patients who are operated for endometrioma. We have observed similar results in our studies.

Keywords: Endometrioma, endometrioma surgery, infertility

[PP-050]

Insertion of a paracentesis catheter may ease the patient follow up in severe ovarian hyperstimulation cases

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Objective: Increased ascites in patients with ovarian hyperstimulation syndrome (OHSS) may lead to pain, pleural and pericardial effusion, disturbed pulmonary functions and oliguria unresponsive to appropriate fluid replacement. Removal of ascites by paracentesis or culdocentesis may be considered in the presence of tense ascites that leads to such complications. If pregnancy occurs, clinical picture may be more severe, last longer and necessitate repeated invasive procedures for ascites drainage. In oliguric patients, adequate urine output may be maintained by increasing fluid replacement, administering volume expanders (albumin or hydroxyethylstarch) and diuretics (in the absence of hemoconcentration); but increased hydration will also lead to increased ascites. Here, we present a case of severe OHSS in whom a paracentesis catheter was inserted during follow up. From her catheter a total of 6000 cc ascites was removed on 6 different occasions without need for repeated invasive procedures.

Case Presentation: A 29-year old primary infertile woman with polycystic ovarian syndrome had undergone in-vitro fertilization because of male factor. Eight day after embryo transfer she admitted to our clinic with nausea, abdominal pain and distension. Transvaginal ultrasound showed bilateral 6×7 cm ovaries and free fluid in the pelvis with a 7 cm depth in the pouch of Douglas. She was hospitalized for a close monitoring of fluid and electrolyte balance. At admission, hematocrit was 44%, serum Na and albumin levels were 129 mmol/L, 2.6 g/dL; respectively. Intravenous hydration with saline, hydroxyethylstarch or albumin were given in order to maintain adequate intravascular volume, adequate urine output and correct electrolyte disturbances. She was dressed with full length venous support stockings, and prophylac-

tic subcutaneous enoxaparin was initiated for thromboembolism prophylaxis. β -hCG on the second day of hospitalization was 212 mIU/mL. During follow up, abdominal distension increased. At 5th day of hospitalization ultrasound showed 9cm depth of fluid at perisplenic and perihepatic areas, bilateral ovaries were about 10×10 cm, there were right sided 1.5 cm-left sided 2.5 cm pleural effusions. Oliguria unresponsive to intravenous fluids developed. At these times intravenous furosemide was administered after normal hematocrit was obtained with adequate hydration. Since she had dyspnea, pleural and pericardial effusion a paracentesis was planned. An 18-gauge paracentesis catheter was inserted by the radiology department to the right lower quadrant and 1500 cc ascites was drained. On the following days, we continued her treatments in the same manner with the aim of obtaining adequate intravascular volume, adequate urine output and normalizing the electrolytes. During follow up a total of 6000cc ascites was drained on 6 different occasions according to symptoms of the patient. β -hCG showed good doubling, increased up to 1957, intrauterine gestational sac was seen, but bleeding started on the day after seeing the sac and pregnancy ended in spontaneous abortion.

Conclusion: Insertion of a paracentesis catheter may ease patient follow up in severe OHSS cases. In the presence of a catheter, the patient may be given intravenous fluids as necessary as needed without worrying about causing an increase in ascites. It may increase patient comfort by permitting bedside ascites removal without a need for any additional invasive procedures.

Keywords: Ascites, ovarian hyperstimulation syndrome, paracentesis

[PP-051]

Scar endometriosis after cesarean section: A case report

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Endometriosis is the presence of functioning endometrial gland and stromal tissue outside the uterine cavity by the effect of ovarian hormones. Metaplasia, retrograde menstruation, mechanical transplantation are some of the most likely pathological mechanism of the disease is usually seen as pelvic endometriosis. However it can sometimes occur in extrapelvic location such as bladder, kidney, umbilicus, omentum, lymph nodes and scar tissue (1). Incidence of abdominal wall endometriosis is 0.03-1.7% and it is difficult to diagnose. It can be misdiagnosed as abdominal wall tumor, granuloma, hematoma, abscess or hernia. Mostly seen symptoms are cyclic abdominopelvic pain, palpable mass on abdominal wall, dysmenorrhea, dyspareunia. Scar endometriosis is generally seen after cesarean operation but it can occur also after hysterectomy, tubal ligations or laparoscopy. We report a scar endometriosis in a patient who has a cesarean operation 5 years ago.

Case: A 37-year-old, G3P1A2 woman presented with a complaint of painful mass at the right side of previous cesarian scar for the last 1 year. She had cesarean delivery 5 years ago. Physical examination revealed a 3x2 cm palpable, painful, solid subcutaneous mass at the right upper side of cesarean scar. Ultrasound examination revealed

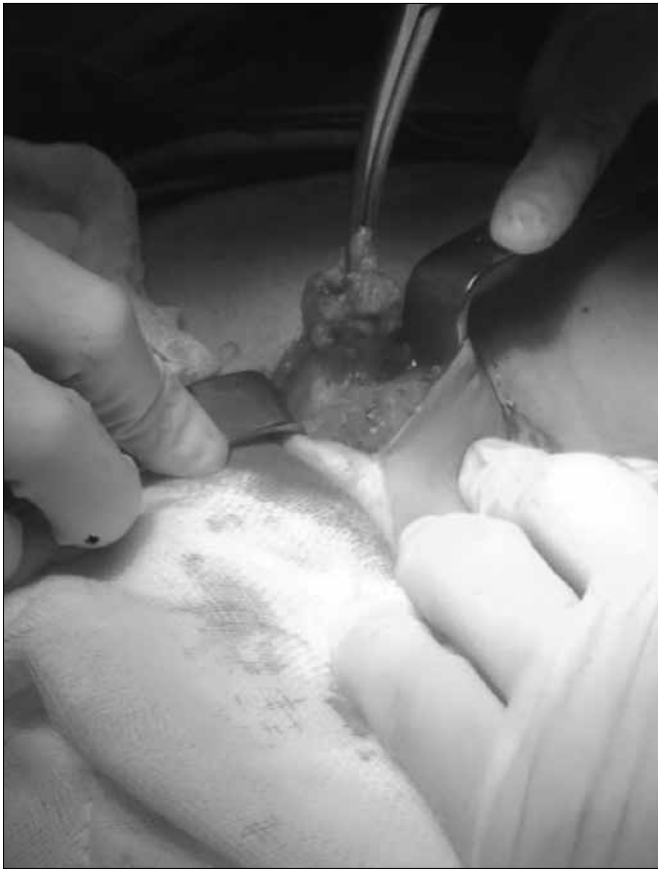


Figure 1.

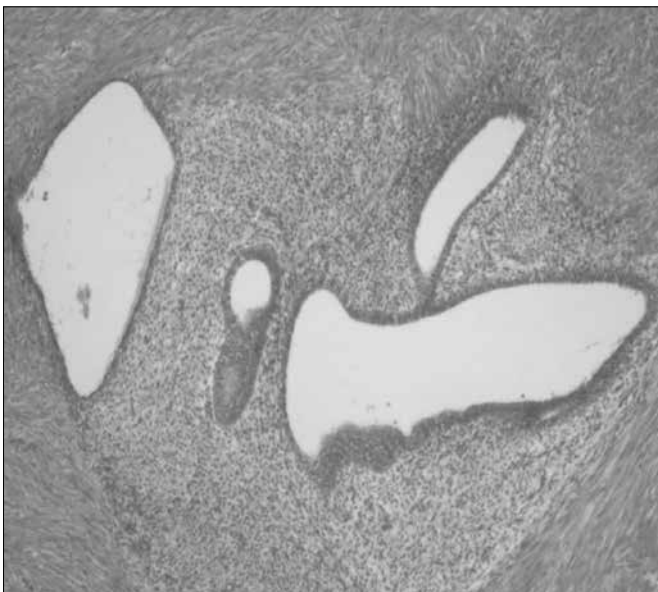


Figure 2.

an irregular solid mass with a dimensions of 19x29 mm magnetic resonance imaging showed a mass extending through transverse fascia, related with rectus and oblique muscles but has no invasion of the muscles. We performed a total excision under general anesthesia and repaired the defective tissue in rectus sheath primarily. [Figure 1]. Histopathology of the mass confirmed the diagnosis of

scar endometriosis [Figure 2]. Postoperative course was uneventful and the patient has been discharged on the first day after operation.

Discussion: Endometriosis defined as presence of endometrial tissue outside the uterine cavity. The extrapelvic type is 8.9% of all endometriosis cases and 4% of these are cutaneous (2). The incidence of scar endometriosis after cesarean operation is 0.03%, hysterotomy before the gestational age of 22 weeks has higher risk. The strongest theory is direct inoculation of endometrial cells to subcutaneous tissue and abdominal fascia. Time interval between operation and presentation is highly variable but the average time is 30 months. This makes the diagnosis more difficult and sometimes diagnosis is only made histopathologically after excision (3).

To conclude, we should be suspicious of scar endometriosis when a patient presents with a painful abdominal mass around previous incision scar. It can be misdiagnosed as abdominal wall tumor, granuloma, hematoma, abscess, lipoma, lymphadenopathy or hernia. The treatment is wide excision of the mass and the definite diagnosis can be made by histopathologically. Recurrence is possible so follow-up of the patient is important.

Keywords: Scar, cesarean section, endometriosis

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[PP-053]

Isolated (Idiopathic) tubal torsion: The diagnostic modalities and review of the literature

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Isolated torsion of fallopian tube without ovarian torsion is a rare gynecologic cause of lower abdominal pain. In this review, we evaluated two isolated tubal torsion, confirmed both surgically and histopathol-

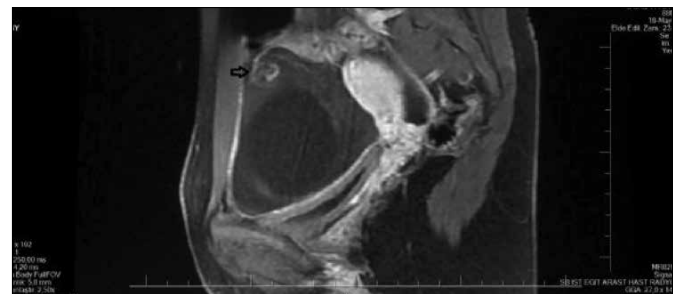


Figure 1. T1-weighted sagittal MR image. Torsion/rotation area in dilated tuba (arrow; mass image which is formed from concentric circles, whorl sign)

Table 1. Clinical and laboratory findings

B	Gaied et al. (4) (n=45)	LiangMing et al. (6) (n=17)	Harmon et al. (7) (n=8)	Wong et al (8) (n=6)	Sun et al. (9) (n=11)	present cases
Lower abdominal pain	100%	100%	100%	100%	100%	100%
Nausea (N)			37.5%			
Vomiting (V)			62.5%			
N/V	53%	41.2%		50%		0
Fever	27%	17.6%	12.5%	83.3%	45.45%	50%
Peritoneal signs		35.3%		100%		100%
Leukocytosis	63%	29.4%		83.3%	45.45%	50%
Clinical and laboratory findings in english literature						

Table 2. Main sonographic findings

	Gaied et al. (4) (n=45)	LiangMing et al. (6) (n=17)	Harmon et al. (7) (n=8)	Wong et al (8) (n=6)	Sun et al. (9) (n=11)	Vijayaraghavan et al. (11) (n=4)	Present cases
Cystic mass	75.7%	100%	87.5%	16.6%	36.4%	100%	100%
Tubular/tortuous mass	21.6%		12.5%		27.3%		
Heterogeneous mass				50%	18.18%		
Thickening of the mass wall						75%	100%
Internal echogenicity						50%	
Free fluid			37.5%	66.6%		75%	100%
Displaced uterus			37.5%				
Whirlpool sign					18.18%	100%	100%

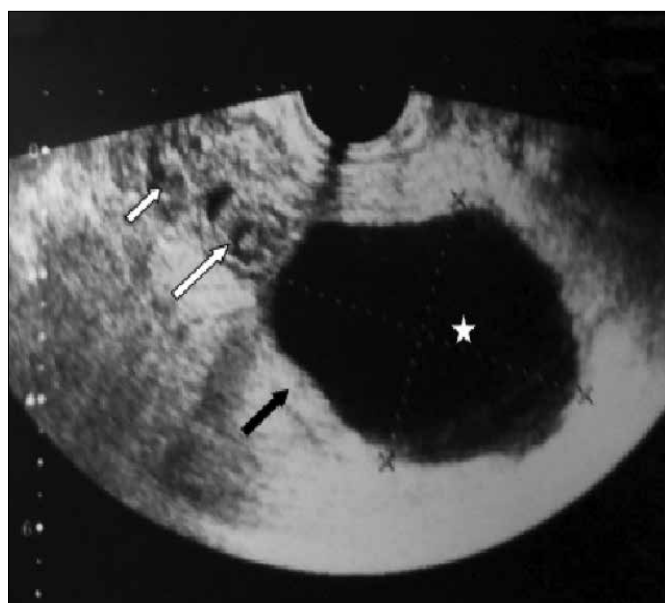


Figure 2. Transvaginal grey scale sonography. Hypoechoic, thick-walled (hyperechoic) (black arrow) cystic mass (asteriks; left dilated tuba uterina) extended from right to the midline with minimal free fluid around the mass. The ovaries are shown at the upper right corner (small white arrow). Torsion/rotation area adjacent to tuba uterina is demonstrated between dilated tuba and the ovary (big white arrow; mass image which is formed from concentric circles, whirlpool sign)

ogically. We re-evaluated imaging studies such as sonography and MRI, and defined characteristic findings for tubal torsion. Although the symptoms and clinical findings are nonspecific, the findings of imaging modalities helps to make the accurate preoperative diagnosis.

Initial obstruction of adnexial veins and lymphatics by any cause leads to pelvic congestion and edema, closure and dilatation of fimbria and partial or total tubal torsion. The closure of fimbria causes hydrosalpinx by leading to the accumulation of tubal secretion. The occurrence of hydrosalpinx is asserted as a possible mechanism that triggers the tubal torsion.

Since there is no spesific clinical findings for tubal torsion, for accurate preoperative diagnosis, imaging technics should be done very carefully.

The sonographic findings are a) cystic mass, b) tubular/tortuous cystic mass, c) heterogeneous mass d) thickening of the cystic mass wall (hyperechoic), e) internal echogenicity in cystic mass, f) free fluid in Douglas pouch or around the mass, g) medial reposition of cystic mass, h) uterine reposition towards to the mass, i) normal ovarian image, and j) whirlpool sign (hypo-hyperechoic mass image caused by rotated tubal portion or peduncle, consists of concentric circles and locates adjacent to the mass).

CT and MRI findings are a) displacement of the cystic mass to the midline, b) dilated tubular/tortuous tissue, c) thickening of the cyst or tubular structure wall (\pm contrast uptake by the wall), d) displacement of the uterus to the lesion, e) free fluid, f) normal ovarian image, g) whirlpool sign.

Consequently, isolated tubal torsion is a gynecological emergency and have an acute onset. There's no specific symptoms, clinical and laboratory findings for the spesific diagnosis. Because of the diagnostic difficulties the cases with the acute pelvic pain should be evaluated carefully by alternative imaging techniques like sonography and MRI.

Keywords: Isolated tubal torsion, tubal torsion, fallopian tube, adnexial torsion

[PP-054]

Abdominal wall endometriosis: an analysis of 66 patients at a tertiary center

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Objective: The objective of the study was to review patient characteristics and surgical findings for excised cases of abdominal wall endometriosis (AWE).

Material and Methods: Medical records of patients with histopathologic diagnosis of abdominal wall endometriosis between years 2005-2015 were investigated retrospectively. Descriptive data were collected and analyzed.

Results: 66 patients with histopathologic diagnosis of endometriosis from abdominal wall were included in our study. The average age of the patients was 32.0 ± 6.8 years and all cases were multiparous. All patients had a previous history of surgical intervention. Except for 3 cases, all patients had a history of cesarean delivery. Major symptoms were palpable mass and pain. The excised mass was usually located in prior surgery scars. The lesions were removed from the subcutaneous tissue, fat layer, fascia and/or muscle layer. The correlation between invasion depth in abdominal wall and mean diameter of endometriotic mass, and number of cesarean sections was not observed.

Conclusion: Cesarean section is the most important predisposing factor in AWE. We believe that due to increasing incidence of the cesarean section, incidence of AWE may increase in the future. Therefore we need more prospective studies about its prognosis and prophylaxis.

Keywords: Abdominal wall endometrioma, cesarean, scar endometriosis, incisional endometriosis, extrapelvic endometriosis

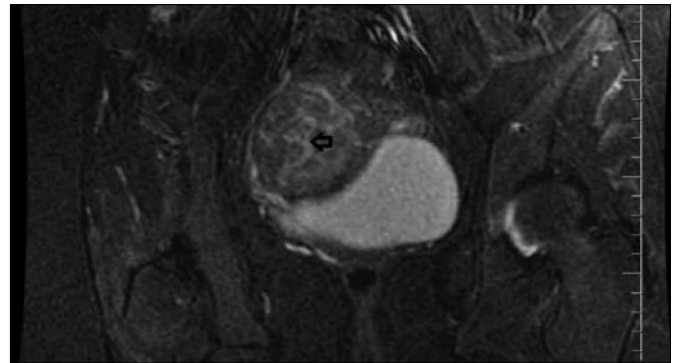


Figure 1. Diffusion weighted coronal section. No significant diffusion restriction in tumor. Tortuous hyperdense structures (arrow).



Figure 2. T2-weighted sagittal section. Uterus (black arrow), irregular hyperintense mass (white arrow).

out contrast restriction in contrast enhanced series. We performed myomectomy. Histopathological diagnosis was angiolipoleiomyoma. Immunohistochemical staining revealed SMA, CD31 and S100 positive, HMB-45 and melan-a was negative. There were no cellular atypia, mitosis and necrosis.

MRI and sonography characteristics of tumor have been mentioned first time by Yaegashii et al.; heterogenous hyperechoic in sonography, and low density in T1, high density tumor in T2. Fundamentally, sonography characteristics of tumor have been described by Braun et al. as sharply margined, irregular, brightly hyperechoic and without acoustic shadowing. Cases with similar findings have been submitted by Cil et al. and Cho et al. in 2004 and 2009. Our case's sonography findings are consistent with those findings. On the other hand, there is no submitted case which describes MR images and characteristics. Our MRI findings are diffuse irregular hyperintensity in T2, diffuse iso and hypointense areas surrounding local hyperintensity in T1, local fat suppression in fat-suppressed T1, and tortuous hyperintense areas without contrast restriction in contrast enhanced series. The compounds of tumor and its densities detect the sonography and MR image characteristics. Fat component reveals as increase echogenicity and/or brightness in sonography, and increased density and fat suppression in MRI. Blood vessels with thickened wall and bundled smooth muscle cells causes increase echogenicity/density in sonography/MRI. Also, this compound structure of tumor does not result with acoustic shadowing in sonography.

Angiolipoleiomyoma is a rare uterine tumor, however, we believe that this described MRI and sonography findings are diagnostic preoperatively.

Keywords: Angiolipoleiomyoma, angiolipoma, uterus, sonography

[PP-055]

Uterine Angiolipoleiomyoma: a rare tumor, preoperative diagnosis and review of the literature

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Uterine angiolipoleiomyoma is very rare, sporadic and benign. The tumor consists of adipose tissue, smooth muscle cell and anomalous blood vessels. Clinic manifestation is non-specific, but sonography and magnetic resonance imaging (MRI) findings are specific.

In our case, 44 years old woman admitted to clinic with lower abdominal pain. Transvaginal sonography revealed 60x80 mm subserous myoma on anterior wall of uterus with sharply margined, irregular, brightly hyperechoic and without acoustic shadowing. MRI revealed the tumor with diffuse irregular hyperintensity in T2, diffuse iso and hypointense areas surrounding local hyperintensity in T1, local fat suppression in fat-suppressed T1, and tortuous hyperintense areas with-

Table 1. Previously reported cases in english literature

Reference	Year	Age	Location	Size (cm)	Symptom	Pathology
Sieinski	1989	52	Corpus	6		Angiolipoleiomyoma
		52	Cervix	16		Angiolipoleiomyoma
		57	Cervix	9		Angiolipoleiomyoma
Laffargue et al.	1993	20	Corpus			Angiomyolipoma
Huang et al.	2000	34	Cervix	5		Angiomyolipoma
Yaegashi et al.	2001	40	Corpus	12	Lower abdominal bloating	Angiomyolipoma
Braun et al.	2002	51	Corpus	2	Menorrhagia	Angiomyolipoma
Cil et al.	2004	32	Corpus	3	Menorrhagia	Angiomyolipoma
Ren et al.	2004	40	Corpus	5	Lower abdominal pain	Angiolipoleiomyoma
Cho et al.	2009	62	Corpus	7	Right sided pain	Angiomyolipoma
Chetty et al.	2009	52	Corpus	4	Menorrhagia	Angiomyolipoma
Kajo et al.	2010	53	Corpus			Angiolipoleiomyoma
Kawauchi et al.	2010	24	Corpus	4	anormally uterine bleeding	Angiomyolipoma
		38	Corpus	2		Angiomyolipoma
		40	Corpus	8	Lower abdominal bloating	Angiomyolipoma
Yilmaz et al.	2013	44	Corpus	16	Lower abdominal bloating	Angiomyolipoma
Lee et al.	2013	41	Corpus			Angiomyolipoma
Totev et al.	2014	56	Corpus	6	Lower abdominal pain	Angiomyolipoma
Present case	2015	44	Corpus	7.5	Lower abdominal pain	Angiolipoleiomyoma

[PP-056]

Vulva and vagina findings in Kindler syndrome; in case of a postcoital bleeding

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Kindler syndrome is an autosomal recessive genetic disease characterized by skin atrophy, chronic inflammation, infantile acral bullae, photosensitivity, and mucosal stenosis (1). It was described in 1954 by Theresa Kindler in a 14-year-old girl with congenital traumatic bullous lesions in the extremities, pigmentation and photosensitivity localized in the body. Over 100 cases have been reported so far about the Kindler Syndrome, which is extremely rare (2). Although it is generally autosomal recessive transitory, autosomal dominant and sporadic transitions have also been reported as well (3). Kindler syndrome stems from the defect in the short arm of the 20th chromosome. It has Bloom syndrome, Cockayne syndrome, dyskeratosis congenita, epidermolysis bullosa, Rothmund-Thomson syndrome and xeroderma pigmentosum together with it. We already know that mucosal changes might be observed in genital organs in Kindler syndrome. Fimosis, which may occur in men with Kindler syndrome is an example for this (4). However, we have not been able to determine care reports on how these genital findings are in women with Kindler syndrome. It was observed that the vulva and the vagina were in atrophic vision at a further level in our case who applied with postcoital severe vaginal

**Figure 1. Vulva**

bleeding. Labium majors and minors were not observed. The vagina was narrow at a further level. The vaginal mucosa tissue was fragile. Vaginal desur with active bleeding was observed due to the narrowness in the vagina and due to the vagina mucosa becoming thinner. The situation which we would like to reveal with this case is to show how the mucosal and anatomical changes in vulva and vagina might appear and what results may be observed in Kindler syndrome at further ages.

Keywords: Kindler syndrome, vulva-vagina findings, postcoital bleeding

[PP-058]

Nontraumatic adnexial and subcutaneous hematoma under warfarin treatment

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Warfarin is a commonly used agent for the prophylaxis and treatment of thromboembolic disorders. It can cause major or fatal bleeding. Non-traumatic hematoma is very rare due to warfarin therapy and occurs in approximately 0.6-6% of patients. Here we present a case with Non-traumatic retroperitoneal and subcutaneous hematoma in a patient on warfarin treatment.

A 66-year-old woman presented to her primary physician with right lower quadrant pain. MRI, revealed a solid-appearing mass on the right adnexial region. The patient was referred to the gynecologist. Transvaginal ultrasonography was performed. The mass measured 77*60 mm and was thought to be ovarian in origin. An adnexial malignancy was suspected, but a subcutaneous hematoma measuring 86x80 mm was also detected. Her medical history included cardiac valve replacement and she has been under Warfarin therapy for 10 years. She reported that 4 weeks prior to referral she was prescribed antibiotics for respiratory infection which enhanced the anticoagulant effect of warfarin. Hematomas were resolved completely in 14 weeks.

Keywords: Hematoma, warfarin

[PP-059]

Impaired olfactory function in patients with PCOS

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Objective: The aim of this study was to assess olfactory function, and its relation with depressive symptoms in patients with polycystic ovary syndrome (PCOS).

Material and Methods: This case-control study included 30 patients diagnosed with PCOS, and 25 healthy age-matched controls. Sniffin' sticks test was used to analyze olfactory functions, and Beck Depression Inventory was used to evaluate depressive symptoms.

Results: Total odor score was significantly lower in PCOS group compared to the control group ($p < 0.005$). Beck depression score was higher in PCOS group ($p < 0.005$). There was a negative correlation between total odor score and Beck Depression Score.

Conclusion: Patients with PCOS have impaired olfactory function. This might be related to depressive disorders that are also observed in those patients.

Keywords: Olfaction disorders, polycystic ovary syndrome

[PP-060]

Evaluation of follitropin α (Gonal-F) and follitropin β (Puregon) in in vitro fertilization cycles; retrospective analysis

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Objective: Numerous hormones might influence the follicular recruitment and development besides endometrial proliferation and cyclic changes. Follicle stimulating hormone (FSH) is the main hormone directly affects the endometrium, which results in the decidualization of endometrial cells. Two popular r-FSHs, follitropin α (Gonal-F) and follitropin β (Puregon), have been used for this purpose, both administered subcutaneously. Gonal-F has a lower pH than Puregon. Some studies have shown that this increases receptor affinity, delays elimination time, and better stimulates ovarian follicles. Although prior studies have compared Gonal-F and Puregon in ART in terms of pregnancy outcomes, information about the possible clinical superiority of one preparation over the other is still under debate. Herein, we aimed to evaluate the effects of two r-FSHs (Gonal-F and Puregon) on clinical pregnancy rate and live birth.

Material and Methods: 277 fresh, non-donor ICSI cycles were retrospectively reviewed in a single tertiary center. Data were collected for baseline characteristics, stimulation parameters, and cycle outcome. The initial gonadotrophin dose used for ovarian stimulation was individualized according to the patient's age, baseline serum FSH concentrations on day 3, body mass index, and previous response to ovarian stimulation. Serial E2 and progesterone levels with two-dimensional follicle measurements by transvaginal ultrasonography were performed until at least two dominant follicles reached dimensions of 18 mm or greater in diameter. GnRH antagonist protocol was started when at least 2 follicles reached 13-14 mm and con-

Table 1. Comparison of the demographic characteristics, laboratory and pregnancy results of two gonadotrophine groups

	Follitropin α (n=158)	Follitropin beta (n=126)	P value
Age (year)	29.30 \pm 4.31	31 (26, 35)	0.821
Infertility duration (year)	5 (2, 7)	4 (2, 7)	0.840
Body Mass Index (kg/m ²)	25.41 \pm 4.09	24.30 (23, 28.05)	0.666
Indication for treatment, n (%)			0.289
Male factor	86 (57)	64 (50.8)	
Unexplained	52 (34.4)	51 (40.5)	
Tubal factor	8 (5.3)	8 (6.3)	
Poor ovarian response	5 (3.3)	3 (2.4)	
Baseline FSH (mIU/mL)	7.68 \pm 1.83	6.82 \pm 1.40	0.401
Baseline E ₂ (pg/mL)	39.18 \pm 15.19	41.75 \pm 14.46	0.694
Antral Follicle count	7 (0, 12)	8 (0, 12)	0.575
Stimulation day	10 (9, 11)	9 (9, 10)	0.268
Total dose (IU)	1972 \pm 744	1742 \pm 559	0.012
Endometrial Thickness (mm)	9.50 (8.80, 11.00)	10.38 \pm 2.05	0.874
Peak E ₂ (pg/mL)	1892 (1349, 2507)	2434 \pm 1183	0.013
Progesterone (ng/mL)	0.9 (0.69, 1.27)	1.0 (1.0, 2.0)	0.062
Oocyte number	10 (8, 13)	11 (9, 15)	0.007
MII number	8.72 \pm 4.17	8 (7, 11.5)	0.020
ZPN number	5 (3, 9)	5 (4, 9)	0.288
Fertilization rate (%)	69.70 \pm 23.42	65.90 \pm 20.80	0.066
Fertilized embryo number	5 (3, 9)	5 (3, 8.5)	0.374
Transferred embryo number, n (%)			0.584
1 embryo	122 (80.8)	105 (83.3)	
2 embryo	29 (19.2)	21 (16.7)	
Clinical pregnancy, n (%)	58 (38.4)	46 (36.5)	0.745
Live birth, n (%)	47 (31.1)	37 (29.4)	0.751

The normally distributed data were given as mean \pm SD, and abnormally distributed data were given as median (IQR 25; IQR 75). Bold values indicate the significance of $p < 0.05$.

tinued until Human chorionic gonadotrophin (HCG) administration for final oocyte maturation, and oocytes were retrieved 36 h after HCG injection and then ICSI were applied as a result of our clinical procedure. Two embryos were transferred in patients ≥ 35 years old and after second IVF cycle trials, legally. Clinical pregnancies were defined as those with fetal heart activity documented on ultrasound examination at 3-4 weeks after embryo transfer. Normally distributed data were reported as mean \pm SD and abnormally distributed data as median (IQR25; IQR75). $P < 0.05$ was accepted as statistically significant.

Results: Baseline, laboratory, and clinical parameters of the patients were given in Table 1. Although clinical pregnancy rate and live birth were same between the groups, total gonadotrophine dose was higher ($p=0.012$), and peak E₂ levels, number of oocytes and number of MII oocytes were lower in follitrophine α group ($p=0.013$; $p=0.007$; $p=0.020$, respectively). Although did not reach statistical significance, progesterone levels were higher in follitrophine β group ($p=0.062$).

Conclusion: The current study was undertaken to evaluate the influence of two different gonadotrophin molecules during IVF cycles on outcomes and to determine the efficacy of gonadotrophins for endometrium and follicle activation in a single tertiary center. Although the clinical and live birth were found similar in this study, the peak E₂ levels, oocytes number and MII oocytes were higher in follitrophine β group. This is a retrospective analysis of data including a small number of patients. Further prospective studies with more participants are required to investigate the differences between two gonadotrophin molecules in COH cycles.

Keywords: Gonadotrophin type, IVF, clinical pregnancy rate, live birth

[PP-061]

Dual trigger with gonadotropin-releasing hormone agonist plus human chorionic gonadotropin versus human chorionic gonadotropin for normal responders in GnRH-antagonist cycles

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Objective: Our aim was to compare the efficacy of two triggering method one with dual triggering with gonadotropin-releasing hormone (GnRH) agonist plus standard dosage human chorionic gonadotropin (hCG) and the other with hCG only for final oocyte maturation on oocyte/follicle ratio and pregnancy rates in normoresponders in GnRH antagonist cycles in invitro fertilization-intrastoplasmic sperm injection (IVF-ICSI).

Material Method: In this retrospective study, all patients underwent GnRH antagonist protocol. When at least ≥ 3 follicles reached ≥ 17 mm diameter, 116 patients received dual trigger with GnRH agonist plus hCG (1mg Leuprolide acetate plus 10.000 IU uhCG) and 178 patients received uhCG (10.000 IU u hCG) for final oocyte maturation. All follicles ≥ 10 mm diameter were aspirated. Number of oocytes and metaphase II oocytes retrieved per aspirated follicles, implantation rate, and clinical pregnancy rate per cycle was recorded.

Results: There was no statistically significant difference in terms of metaphase II oocyte ratio per aspirated follicle, implantation rate and clinical pregnancy rate between the dual trigger group and hCG only group (45.7% vs. 51%; 35.4% vs.30.3% and 45%vs. 40% respectively). Oocyte/ follicle ratio was significantly higher in dual trigger group (68.2%vs 63.8% $p=0.028$).

Conclusions: Dual triggering in normal responders with a GnRH-agonist and a standard dosage of hCG is superior to hCG only protocol in terms of oocyte/follicle ratio but does not improve metaphase II oocyte, implantation and clinical pregnancy rates in GnRH-antagonist cycles.

Keywords: Chorionic gonadotropin

[PP-062]

Cervical pregnancy: Report of three cases

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Objective: Cervical pregnancy is a rare form of ectopic pregnancy. It has a high rate of morbidity since it may be complicated with massive bleeding and even hysterectomy. Optimal mode of treatment is unclear. Here we present 3 cases of cervical pregnancies and their outcomes.

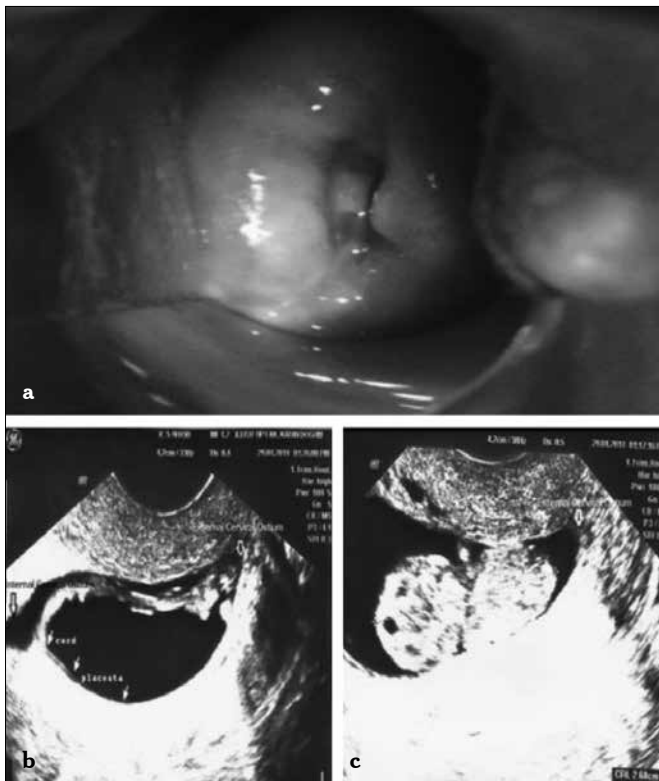


Figure 1 a-c. A purple, membranous tissue was observing from the external cervical o (a), A gestational sac (GS) located in the cervical canal, with a posterior placenta, and a fetus whose crown-rump length (CRL) measured 94/7 weeks with an empty endometrium (b, c).



Figure 2. A GS located in cervical canal with no yolk-sac or fetal pole

Case 1: A 39-year-old woman with irregular menstruations admitted to emergency room with lower abdominal pain and mild vaginal bleeding. On speculum examination; cervix was large and a purple, membranous tissue in the cervical canal was observed from the external cervical os (Figure 1a). Transvaginal ultrasound (TVUS) showed an empty endometrium with a thickness of 10 mm. A gestational sac (GS) was located in the cervical canal, with a posterior placenta, and a fetus whose crown-rump length (CRL) measured 9 4/7 weeks (Fig-

ure 1b, c). Fetal heart beat was positive. With a diagnosis of cervical pregnancy, 50 mg/m² methotrexate (mtx) was administered intramuscularly (im) after informing the patient about the possible complications and risk of failure. β -hCG levels on 0, 4th and 7th days of mtx were 26543, 34754 and 23934 mIU/mL respectively. On the 9th day, dilatation and curettage (D&C) was performed due to increased vaginal bleeding, 18-french foley catheter was inserted into cervical canal and filled with 50 mL saline. Three hours after the operation, excessive vaginal bleeding and tachycardia (124/bpm) occurred. Total abdominal hysterectomy without bilateral salpingo-oophorectomy was performed. She was discharged 2 days after surgery.

Case 2: A 21-year old woman admitted with delayed menstruation and spotting. Pelvic examination demonstrated minimal bleeding from cervix and painful cervical movements. TVUS demonstrated a GS located in cervical canal with no yolk-sac or fetal pole. With a diagnosis of cervical pregnancy, im mtx was administered. β -HCG was 2716 mIU/mL at admission; 2123 and 1665 mIU/mL on day 4th and 7th, respectively. Although there was sufficient decline in β -HCG levels, we administered a second dose of mtx on day 7 to decrease the risk of failure. At weekly controls, her β -HCG values progressively declined and became negative at the end of 4 weeks.

Case 3: A 30-year old woman who had in-vitro fertilization (IVF) + embryo transfer (ET) 33-days ago admitted with minimal vaginal bleeding. β -HCG values at 12th and 14th days of ET were 23 and 25 mIU/mL, she was told by the IVF center that pregnancy was negative and β -HCG was not followed. 28 days after ET β -HCG was 1090 mIU/mL, but she had vaginal bleeding. β -HCG showed good doubling (1900 mIU/mL and 3200 mIU/mL) but no intrauterine GS was present. At admission her β -HCG level was 2330 mIU/mL and we observed GS which was located in the cervical canal with 7mm empty endometrium (Figure 2). Im mtx was administered with a diagnosis of cervical pregnancy. With weekly follow-up for 3 weeks hcg level showed adequate decline, and her controls are still going on.

Conclusion: Optimal approach to cervical pregnancy is unclear. Medical management seems to be safer but risk of failure is higher than tubal ectopic pregnancies. Massive bleeding may complicate both types of treatment. Pre-treatment patient informing and preparing for massive bleeding are important points in the management of such patients.

Keywords: Ectopic pregnancy, cervical ectopic pregnancy

[PP-063]

Caudal regression syndrome with post partum diagnosis shift

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Introduction: Currarino traid is a part of caudal regression syndrome and presentation include partial agenesis os sacrum, anal atresia and pre-sacral mass (meningocele and/or teratoma). Abnormal ultrasound findings can be seen together and may worsen clinical outcome.

Case Description: In a multipartient 29 years old woman who has pelvic kidney in her history, admitted to obstetrics ward for suspected

caudal regression syndrome. On fetal ultrasound exam bilateral pelvic dilatation of kidneys, single umbilical artery, target sign at perineum level, pre sacral hypoechogenic mass, sacral agenesis and medulla spinalis defect dedected.

50 gr glucose Screening was positive (147 mg/dL) and 100 gr test revealed normal results except fasting glucose level (97 mg/dL). First trimester HbA1c level was 6.1, repeated test result was 5.5 at second trimester.

Patient consulted to Endocrinology department and insulin therapy started with 2 IU R and 4 IU NPH insulin after couple days of venous glucose level controls.

Fetal MR results showed lumbosacral canal agenesis and agenesis of medulla spinalis at respective level but there was no sign of pre-sacral mass. Term infant (39w5d) was born with vaginal route and new born examination revealed flexion of hip joints and extension of knee joints bilaterally.

Colostomy performed post partum second day.

Chromosomal G- banding at 500 band level showed no chromosomal abnormality.

General information and Discussion: Even prenatal ultrasound examinations suspected with Currarion triad, Fetal MRI and post partum

examinations didn't support first diagnosis and last diagnosis was caudal regression syndrome.

Conclusion: Ultrasound is most valuable tool in obstetric diagnosis and improved image quality brings unprecedented advancements to daily practice and diagnostic capabilities. Yet MRI and radiographic examinations still needed tools for differential diagnosis.

Keywords: Caudal regression syndrome, Currarino syndrome

[PP-065]

First trimester fetus in utero diagnosed as iniencephaly: A case report

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Introduction: Iniencephaly is a lethal neural tube defect which is recognized at first glance with the typical abnormal posture of the fetus. The classical findings are hyper extended neck (a stargazer appearance of the fetus), an occipital bone defect, and neural tube defect of the cervico-thoracic vertebrae. These fetuses are shorter than normal but have a large biparietal diameter (BPD) at ultrasound. Most of these fetuses die in utero but very rare live birth cases have died very shortly after birth. This condition should be suspected in fetuses presenting with this abnormal posture. Here we present a fetus with iniencephaly diagnosed and terminated at the first trimester.

Case: A 31 year old woman at her first pregnancy was referred to our outpatient clinic at 133/7 weeks of gestation because of pathological appearance of the fetal cranium and neck. Fetal crown rump length (CRL) was consistent with 11 weeks. The fetal heart beat was positive



Figure 1. Bilaterally extension of legs could be seen through second and third trimester



Figure 2. Pre sacral mass in third trimester



Figure 1. Bilaterally extension of legs could be seen through second and third trimester

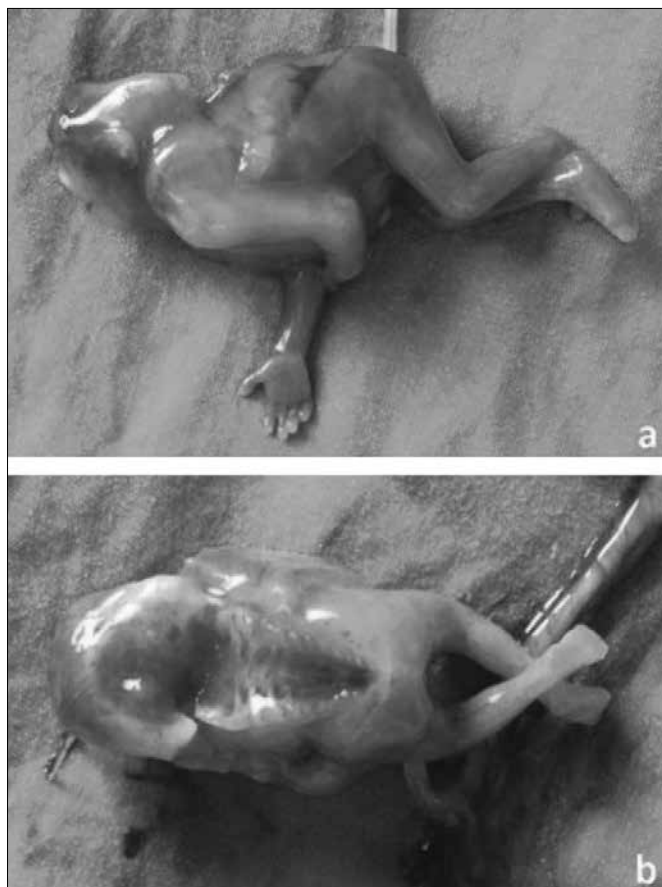


Figure 2. a, b. Lateral view of the fetus demonstrating absence of the neck and hyper extended head (a), on the posterior view of the fetus an absent neck, an occipital defect and cervico-thoraco-lumbar neural tube defect is seen (b)

and there was dextrocardia. Ultrasound examination demonstrated a fetus with a hyper extended neck (Figure 1). The cervical vertebrae could not be visualized adequately. The BPD was measuring 132/7 weeks. The position of the fetal neck did not change on repeated examinations and it persistently had a hyper extended position. With these findings, a possible diagnosis of iniencephaly was suspected. The patient mentioned that she did not use folic acid at her pregnancy. After counseling, the patient elected pregnancy termination. At 136/7 weeks of gestation, medical termination of pregnancy was induced with misoprostol. She aborted a 25 gram male fetus whose neck was absent, head was hyper extended and was just adjacent to the thoracic vertebra with a face looking upward (Figure 2a). There was a huge neural tube defect extending from the occipital region to the lumbar area (Figure 2b). The pathological examination confirmed the dextrocardia.

Conclusion: Iniencephaly is a type of neural tube defect that can be diagnosed in the first trimester by the help of the overtly abnormal posture. There may be additional congenital anomalies like dextrocardia in our case. With early diagnosis, early patient counseling and pregnancy termination may be possible that'll help to decrease maternal morbidity. It is important to advise the patient high dose folic acid supplementation in her next pregnancy starting at least 3 months prior to conception.

Keywords: Absent fetal neck, hyper extended head, iniencephaly, spina bifida

[PP-066]

Chromosomal analysis results of 268 female patients with habitual abortus etiology who admitted to Düzce University Training and Research Hospital between 2011 and 2015 in Western Blacksea region

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Habitual abortus or recurrent miscarriage is described as at least 2 or more consecutive pregnancy losses. The etiologic reasons are maternal system disorders, uterus anomalies, genetic anomalies and autoimmune disorders. The Chromosomes obtained from peripheral blood culture of 268 females patients with habitual abortus etiology who admitted to Düzce University Training and Research Hospital between 2011 and 2015 were analysed for each patients. According to analysis results; 241 females have normal karyotype (46,XX) (89.93%), 5 females have 46,XX,inv(9)(p11q13) (1.87%), 4 females have 46,XX,-1qh+ (1.49%), 3 females have 46,XX,16qh+ (1.12%), 2 females have 46,XX,9qh+ (0.75%), 1 female has 46,XX,15cenh+ (0.37%), 1 female has 46,XX,21ps+ (0.37%), 1 female has 46,XX,13pst+ps+ (0.37%), 1 female has 46,XX,del(15)(p11.2) (0.37%), 2 females have 45,X/46,XX (0.75%), 2 females have 45,X/47,XXX/46,XX (0.75%), 2 females have 47,XXX/46,XX (0.75%), 1 female has 47,XXX/46,XX/45,X (0.37%), 1 female has 46,XX,t(18;20)(q22;p11.2) (0.37%) and 1 females has 46,XX,t(13;16)(q34;q12) (0.37%). Abnormal karyotypes were detected in 27 (10.07%) from 268 females with habitual abortus etiology.

Keywords: Habitual abortus, recurrent miscarriage

[PP-068]

Comparison of the posterior urethrovesical angle among the subtypes of urinary incontinence

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Objective: To compare the level of difference in posterior urethro-vesical angle (PUVA) at rest and Valsalva maneuver among subtypes of urinary incontinence.

Material and Methods: This is prospective study included 100 women with urogynecological symptoms selected random from patients attending outpatient clinic of Zeynep Kamil Women and Children's Health Teaching and Research Hospital. All patients underwent detailed urogynecological examination and transperineal sonography.

The probe was applied to the perineum in the axial and sagittal planes. The patients were examined at rest and during Valsalva maneuver. The PUVA between proximal urethra and posterior of the trigone was evaluated at rest and Valsalva maneuver. The level of difference in PUVA at rest and Valsalva maneuver were compared.

Results: The means of change in PUVA were 33.94 ± 10.37 in USI; 33.06 ± 13.08 in mixed incontinence (MI) and 15.69 ± 9.61 degrees in urge incontinence (UI). There was significant difference among subtypes of urinary incontinence in terms of difference in PUVA at rest and Valsalva maneuver. However; there was no significant difference between patients with USI and MI.

Conclusion: Patients with UI had significantly lower level of difference in PUVA than patients with USI and MI, respectively. Perineal ultrasonography seems to be highly effective and easily performed method in assessing PUVA in different incontinence symptoms.

Keywords: Posterior urethrovaginal angle, perineal ultrasonography, urinary incontinence

[PP-069]

Treatment success in patient converted to IVF (rescue IVF) from ovulation induction with gonadotrophin: Report of three cases

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Objective: Ovulation induction and intrauterine insemination (IUI) is generally indicated as the first-line treatment in unexplained and mild male factor subfertility. The increased number of oocytes available for fertilization and implantation will also increase the possibility of multiple pregnancies and ovarian hyperstimulation syndrome (OHSS). In such cases cycle cancellation may be required, which can be devastating for both the patient and clinician. In recent years, it is expressed that conversion to rescue in vitro fertilization (IVF) cycle instead of cancellation may be possible to get rid of this destructive process in these cases. In this study, we want to present the results of three cases, converted to IVF from IUI cycles.

Material and Methods: This study was conducted in Zekai Tahir Burak Women's Health Training and Research Hospital with fresh, non-donor ICSI cycles. In three patients who agreed to return to IVF treatment, IVF was performed for a fee due to the health policy and they were evaluated after approving the study by the Ethical Committee of Hospital. Serial E2 and progesterone levels with two-dimensional follicle measurements by transvaginal ultrasonography were performed 4th day of stimulation and two days interval. Couples were informed about the cycle cancellation or conversion to IVF due to ≥ 2 dominant follicle development was observed on the 8th day of stimulation. GnRH antagonist was started immediately until human chorionic gonadotrophin (hCG) administration, and oocytes were retrieved 36 h after HCG injection and then ICSI were applied as a result of our clinical procedure. Clinical pregnancies were defined as those with fetal

Table 1. Demographic, clinical characteristics, laboratory and pregnancy results of women who underwent Rescue IVF

	Case 1	Case 2	Case 3
Age (year)	32	37	27
Body mass index (kg/m ²)	25	21.9	21
Baseline FSH (mIU/mL)	9	6.5	12.7
Baseline E ₂ (pg/mL)	45	24	26
Antral follicle count	11	10	10
Indication for IUI	Unexplained infertility	Unexplained infertility	Expected poor response
Gonadotrophin type	hMG	hMG	hMG
Stimulation day	10	10	10
Antagonist beginning day	8	8	8
Follicle diameter on day 8th of stimulation			
>13 mm in diameter	5	8	6
>14 mm in diameter	4	5	5
Total antagonist duration (day)	3	3	3
Total gonadotrophin dose (IU)	1200	975	1350
Peak E ₂ (pg/mL)	1310	2820	835
Endometrial thickness (mm)	9	8.5	10
Oocyte number	7	11	5
MII number	7	9	1
2PN number	4	6	1
Fertilization rate (%)	57	67	100
Fertilized embryo number	4	6	1
Transferred embryo number	1	2	1
Transfer day	3	5	3
Luteal support	P + GnRH-a	P + GnRH-a	P + GnRH-a
Biochemical pregnancy	Yes	Yes	Yes
Ongoing pregnancy	Yes	Yes	No

hMG: human menopausal gonadotrophin, **P:** progesterone, **GnRH-a:** Gonadotrophin releasing hormone agonist

heart activity documented on ultrasound examination at 3-4 weeks after embryo transfer.

Results: Three patients with fresh, non-donor ICSI cycles were evaluated in this retrospective study. Baseline, laboratory, and clinical parameters of the patients were given in Table 1. Although one patient was over 35 years old and in another one patient the baseline FSH level was 12.7 mIU/mL, we began to administer same dose of hMG (150 IU daily) in all three cases because of the determining normal serum E2 levels and antral follicle count on ultrasonography. The lowest hMG requirement, however the highest peak E2 level was observed in patient who was over 35 years old. While the number of oocytes collected from patients were 7, 11 and 5; MII oocyte were 7, 9 and 1, respectively. The woman from whom one MII oocyte obtained, had a 12.7 mIU/mL baseline FSH level. Whereas one embryo transferred in two women; 2 embryos were transferred in one, due to the age of 37. hCG was detected positive in every three women, however clinical pregnancy were seen in two cycle. No complications were observed in any patient.

Conclusion: We observed that conversion of gonadotropin IUI cycles in patients with excessive follicles to IVF is a safe, secure and successful strategy. Furthermore, owing to lack of cycle cancellation, it was not destructive for patients. This is a retrospective analysis of data including only three patients. Further prospective studies with more participants will give us more clear and robust information in this procedure.

Keywords: OI, IUI, high-responder patients, rescue IVF

[PP-070]

Acute compartment syndrome of forearm after gynecologic surgery: A case report

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Introduction: The muscle groups of the human limbs are divided into sections, or compartments, formed by strong, unyielding fascial membranes. Compartment syndrome occurs when increased pressure within a compartment compromises the circulation and function of the tissues within that space (1). It may be acute or chronic and it is a surgical emergency. Acute compartment syndrome (ACS) most often develops soon after significant trauma, particularly involving long bone fractures. Possible causes include forceful direct trauma to a tissue compartment, severe thermal burns, overly constrictive bandages (usually circumferential), penetrating trauma, injury to vascular structures in the extremities, and in some cases, even minor injuries. Unconscious or obtunded patients with prolonged limb compression, either during surgery or due to recreational drug abuse, can develop ACS secondary to soft tissue injury and swelling. In brief, any condition that decreases the capacity of a compartment or increases the volume of fluid within a compartment raises intracompartmental pressure and places the patient at risk for developing compartment syndrome. Here, we present a case of acute compartment syndrome of forearm after gynecologic surgery.

Case: Our patient was 44 years old, presented in gynecology outpatient clinic for annual visit. In gynecologic examination, transvaginal ultrasound revealed a leiomyoma, approximately 9.9x8.5 cm in size, located in fundal region. Myomectomy was performed. On postoperative 7th hour, during routine visit, swelling and ecchymosis were seen (Figure 1). Pain with passive stretch of fingers, paresthesia of forearm and hand were reported at initial examination. Doppler ultrasonography of upper extremities showed triphasic flow in ulnar and radial arteries. After plastic and reconstructive surgery consultation, a diagnosis of acute compartment syndrome of hand due to fluid extravasation from intravenous line was made. Emergency fasciotomy was performed by plastic surgery department (Figure 2). Elevation of forearm was advised after surgery. The patient was discharged after postoperative 11th day.

Results: Acute compartment syndrome is a surgical emergency and perhaps the most important aspect of diagnosis is to maintain a high index of suspicion among patients at risk for acute compartment syndrome. Immediate management of suspected ACS includes relieving all external pressure on the compartment (2). Any dressing, splint, cast, or other restrictive covering should be removed. In remote areas and hospitals with limited surgical coverage, the patient should be transferred immediately to a hospital where compartment pressures can be measured and fasciotomies performed. Early diagnosis and appropriate treatment of ACS generally produce good functional and cosmetic results. Skin grafts may be needed for incisions and muscle weakness can persist in the affected limb (3). The most important determinant of a poor outcome from ACS is a delayed or missed diagnosis. ACS can result in muscle contracture, sensory deficits, paralysis, infection, fracture nonunion, and possibly limb amputation.



Figure 1. Preop hand



Figure 2. After fasciotomies

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Keywords: Compartment syndrome, myomectomy, fasciotomie

[PP-071]

Vaginal birth after cesarian section: A survey study of health care providers

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Objective: The aim of this study was to ascertain the knowledge for Vaginal Birth after Cesarean Section (VBAC) in people who are working in hospital

Material and Methods: This descriptive study was done in Mustafa Kemal University, School of Medicine Hospital and a total of 100 surveys were randomized distributed. The surveys were prepared by using the patient acknowledgement form of American College of Obstetricians and Gynecologists (ACOG).

Results: Eighty seven surveys were returned and evaluated. 'Is VBAC possible?' question was responded by 63 (72.4%) health care providers as 'yes' and 24 (27.6%) as 'no'. There were no difference between occupation groups for this question ($p=0.3$). 'What should be the uterine incision scar in previous section to achieve VBAC?' was asked to persons that said 'yes' for former question. Twenty one (33.3%) of them responded as 'I don't know', 30 (47.6%) as 'transvers' and 12 (19%) as 'vertical'.

Same group also responded of minimum previous cesarian section number for VBAC 25 (39.7%) as 'I don't know', 13 (20.6%) people as 1, 13 (20.6%) as 2, 11 (17.5%) people as 3 and 1 (1.6%) person as 4. 'What is the risk of VBAC?' was asked and responded as 'I don't know' from 29 (46%) people, as 'uterine rupture' from 30 (47.6%) people and 'no risk' from 4 (6.3%) people.

Conclusion: In conclusion even though VBAC is considered as an option in most of health care providers they have not sufficient knowledge about condition and risks of VBAC. Informing of this group may help to decrease cesarian rate in the population.

Keywords: Health care provider, knowledge, VBAC

[PP-072]

Acute kidney injury necessitating dialysis in two preeclamptic patients

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Objective: Acute kidney injury (AKI) occurs with accumulation of urea and nitrogenous wastes in the body as a result of sudden loss of kidney functions. Pregnancy associated AKI occurs very rarely and is mostly caused by severe preeclampsia, hemolytic uremic syndrome, acute fatty liver of pregnancy and acute tubular necrosis as a result of bleeding in late pregnancy. In developed countries, only 1/20000 pregnant women develop an AKI that necessitates renal replacement therapy. Here, we report postpartum AKI in two preeclamptic women both of whom necessitated hemodialysis.

Case 1: 27 year old G5P2A2 woman, with a 265/7 week monochorionic diamniotic twin pregnancy was admitted because of increased blood pressure for the last 20 days. Biometric measurements, amniotic fluid volumes, heart rates of both fetuses, placenta were normal at ultrasound examination. She had headache with an admission blood pressure of 140/90 mmHg, 3+ protein at spot urine; a hemoglobin of 9.9g/dL and normal platelet number, liver and kidney function tests. At the evening of hospitalization she suddenly developed left lower quadrant pain and increase in uterine tonus. With a diagnosis of abruption emergency cesarean section was performed. A 700 gr ex-fetus and a 730 gr fetus with 1st-5th APGAR scores of 5-7 were delivered. At the surgery, placental abruption and a 6x6 cm retroplacental hematoma were seen. Postoperatively, she developed oliguria, her blood urea nitrogen (BUN) and creatinine increased to 113 and 5.97 mg/dL, respectively. Her Hb values on the 1st and 2nd postoperative days were 8.1 and 6.7 gr/dL which was thought to show a dilutional decline. In spite of hydration and diuretics her BUN and creatinine values increased to 118 and 6.08 mg/dL. Therefore, hemodialysis was performed on the 3rd postoperative day. On following days, her renal functions progressively returned to normal. She was discharged on the 7th day with normal renal functions.

Case 2: 30 year old G1P0 woman was referred to our clinics at 32 gestational weeks with hypertension. She had 3+ pretibial edema, normal hemoglobin (12.8g/dL), platelet, liver and renal function tests and 1+ protein at spot urine. At the day of hospitalization, her maximum blood pressure was 150/90mmHg; non stress test showed repetitive late decelerations and by emergency cesarean section, a 1800 gram male infant with a 1st-5th minute APGAR scores of 5-7 was delivered. Although there was no abruption and normal amount of intra and post-operative bleeding, postoperatively, her urine output stayed <20 mL/hr and did not respond to fluid treatment. On serial laboratory evaluations, her Hb declined to 7.9 g/dL (thought to be a dilutional decrease); BUN, creatinine and K levels increased to 54 mg/dL, 1.65 mg/dL and 6.7mmol/l respectively. On the second postoperative day hemodialysis was performed with a diagnosis of AKI later her laboratory parameters returned to normal progressively. She was discharged 1 week after the operation.

Conclusion: Most common cause of AKI requiring renal replacement therapy in late pregnancy is severe preeclampsia in which severe hypertension, increased liver function tests and low platelet counts are present. However, rarely even apparently mild pre-eclamptic cases like ours can have this serious complication. Early recognition and appropriate management are of vital importance.

Keywords: Mild pre-eclampsia, abruptio placenta, acute kidney injury

[PP-073]

Epulis gravidarum: A case report

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Introduction: Epulis gravidarum (granuloma gravidarum) is a tumor like enlargement of the gingival or alveolar mucosa which generally occurs in the second or third trimesters. It is a benign, pink, exophytic tissue overgrowth that develops within days to weeks on a pedunculated or sessile base. It is highly vascular and bleeds easily with touching. Here we present a 36 week pregnant woman with epulis gravidarum whose lesion spontaneously regressed in the postpartum period.

Case: A 27-year-old G1P1 woman admitted for her routine prenatal care at 36 weeks of gestation. Her first pregnancy was complicated by gestational diabetes. She had her first delivery at 40th gestational week by cesarean section 11 months ago. She weighed 98 kg and her blood pressure was 130/80 mmHg. Uterine size was appropriate for gesta-

tional age. She had gestational diabetes type I-b, but her blood sugar levels were not well regulated. She did not have any other systemic diseases. While the patient was speaking, we noticed an irregular fleshy growth extending over her two upper middle incisors (Figure 1a). After everting her upper lip and examining the gum of the upper jaw in detail, a 2 centimeters long irregular fleshy mass was detected arising from the gum and growing over her two upper middle incisor teeth (Figure 1b). The lesion was firm to touch, non-tender and was not extending to the oral cavity. The patient had a good oral hygiene. The patient had no problem with the lesion and she stated that in her previous pregnancy a very similar lesion appeared at the same location which spontaneously disappeared in the postpartum period. At 38th gestational weeks she was delivered by cesarean section since she had regular uterine contractions. The dentist evaluating the patient had no recommendation except regular brushing of teeth. He did not plan any surgical intervention. Three weeks after the operation, we observed a significant decrease in mass size (Figure 1c).

Conclusion: Hormonal changes in pregnancy also influence the gingiva. Epulis gravidarum most probably occurs as a result of these hormonal changes. It is a simple and transient hyperplastic lesion of the gingiva which disappears spontaneously in the postpartum period and does not necessitate any surgical intervention.

Keywords: Epulis, gingiva, gravidarum, pregnancy

[PP-074]

Interstitial pregnancy and cornual rupture after ipsilateral salpingo-oophorectomy

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Introduction: Interstitial pregnancy is a substantial cause of maternal mortality and morbidity. However occurrence of an ectopic pregnancy on the same side with a previous salpingo-oophorectomy is extremely rare and diagnosis can be delayed.

Case: A 38-year-old woman (gravida 3, para 1 with normal vaginal delivery, one miscarriage) was admitted to our emergency department with complaints of vaginal bleeding and pelvic pain, six weeks after her last menstrual period. In her previous history, she had a right salpingo-oophorectomy for mature cystic teratoma, six years prior. Physical examination revealed tenderness in the right iliac fossa with hypotension. Transvaginal ultrasound showed an embryo with cardiac activity (crown-rump length 4 mm, six weeks gestation) at the right cornual area. Uterine cavity was empty and hemoperitoneum was detected. Considering the patient's clinical situation, a definitive diagnosis of ruptured interstitial pregnancy was established. Exploration through infraumbilical incision at previous scar revealed that hemoperitoneum of 400 mL and right cornual rupture with ongoing bleeding (Figure 1). Right cornual resection was performed. Pathological examination reported as plasental tissue at cornual resection material. The patient was discharged home on the second post-operative day with an uneventful recovery.

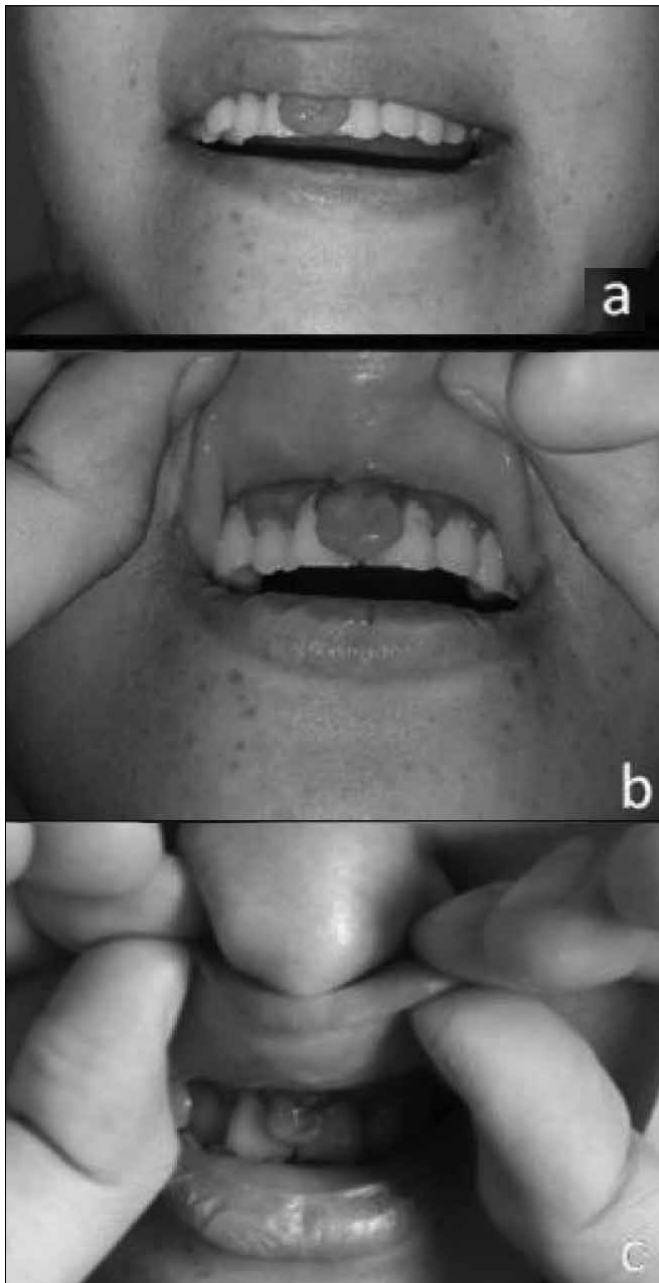


Figure 1 a-c. An irregular fleshy mass arising from the gum and growing over two upper middle incisor teeth (a, b), three weeks after the operation, a significant decrease were observed in mass size (c)

Discussion: Intrauterin transmigration of blastocyste is the accentuated hypothesize. Early diagnose and treatment of cornual pregnancy is very important to decrease morbidity. Physician should consider this rare type of ectopic pregnancy while examining patients with prior salpingectomy or salpingo-oophorectomy.

Keywords: Interstitial pregnancy, ectopic pregnancy, gynecologic acute abdomen

[PP-075]

Pelvic mesenteric cysts mimicking gynecologic adnexal mass

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Introduction: Non-gynecologic adnexal masses can be originated from appendix, bladder or intestines. Mesenteric cysts are not common causes of non-gynecologic adnexal mass. So preoperative diagnosis and treatment of mesenteric cysts are difficult since they are rare and lack of specific symptoms.

Case: A 23 years old G1P1 woman referred to our unit for a persisting adnexal mass for 6 months. She was asymptomatic except mild pelvic pain. She was receiving daily dienogest (2 mg/day) (Visanne) for the last 5 months. In this time there were no change in pain complaint and mass size. Vaginal examination revealed a mobile, painless semi-solid, 5-6cm mass in the right adnexa. In rectal examination, there was a solid, heterogeneous mass in the right adnexa next to the uterus. Laboratory tests were in normal levels including CA-125. Laparoscopic exploration revealed that both of the ovaries, tubes, and the uterus were normal. However, there was a mobile, semi-solid, smooth surfaced mass just next to the right ovary and the fallopian tube. The patient was consulted to the general surgeons. General surgeon indicated that the mass was a mesenteric cyst and since there were no sign of inflammation, necrosis, bleeding, vegetation, or irregularity on the mass and colonic obstruction findings, surgical treatment was not necessary for the patient.

Discussion: It can be discussible for this case whether there was a need for elective surgical treatment or not. Consulted intestinal surgeon indicated that it was not necessary to resect the cyst in this case since the patient was asymptomatic and the cyst was not complicated.

Some patients may require bowel resection for complete resection of the cyst. As a conclusion it must be kept in mind that some of the adnexal masses can be non-gynecologic in origin.

Keywords: Pelvic masses, mesenteric cysts, endometrioma

[PP-076]

Meckel's Diverticulum Perforation Mimicking Gynecologic Acute Abdomen

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Introduction: Meckel's diverticulum is the most common congenital anomaly of the gastrointestinal tract and generally diagnosed in childhood. In adult population, it is diagnosed incidentally during other surgical procedure or when symptoms occurred due to complications like hemorrhage and obstruction

Case: A 28-year-old multiparous woman was admitted to our emergency department with the complaints of severe pelvic pain (acute onset), nausea, and vomiting. Physical examination revealed guarding and rebound tenderness (widespread, but prominent on lower quadrant) with normal vital signs. Laboratory investigations were within normal limits except increased white blood cell (18,800 /mm³ (91% neutrophils). Transvaginal ultrasound designated dense content, septated, particulate free fluid in the pouch of Douglas, probably consistent with haemorrhagic. Bilateral hydrosalpinx was detected. According to the patient's clinical situation, a definitive diagnosis of gynecologic acute abdomen established and explorative laparotomy was planned. A perforated Meckel's diverticulum was observed 90 cm proximally from the ileocecal valve. Diverticulum resected along with 15 cm of ileum from both proximal and distal sides of perforation area and entero-enteric anastomosis (end-to-end) was performed followed by an abundant washing and cleaning of the abdominal cavity. Pathological examination reported as ileal tissue with ulceration area around perforated diverticulum. The patient was discharged home on the tenth post-operative day with an uneventful recovery.

Discussion: Meckel's diverticulum is usually asymptomatic and incidentally found during laparotomy due to other gastrointestinal diseases. Furthermore, Meckel's diverticulum is more likely to be symptomatic in children than adults, herein presenting our unusual case is two-fold. First, we would like to highlight that Meckel's diverticulum can be symptomatic in adult patients. Second, symptoms of Meckel's diverticulum can mimic gynecologic acute abdomen

Keywords: Meckel's diverticulum, abdominal pain, gynecologic acute abdomen, perforation

[PP-077]

A triplet pregnancy follow-up experience with hypogonadotropic hypogonadism patient

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Introduction: Hypogonadotropic hypogonadism (HH) is rare reasons of female fertility. In these patients to predict the ovarian reserve is not always possible before the treatment. In triplet pregnancies, the risk of complications is increasing according to the twin pregnancy.

Monitoring the pregnancy is an important feature in order to prevent the incidence of this complication and early detection.

Case: A 22 year-old patient with a diagnosis of HH, after ovulation induction intrauterine insemination applied outside the centre and as a result of the treatment triplet pregnancies has been observed. The patient was applied to our hospital in gestational week of 12th. It was learned that due to primary amenorrhea of 18 years old patients has been investigated from her anamnesis. In the conducted examination, tanner stage 1 thelarche and tanner stage 2 pubarche has been detected and these have been monitored as uterus and ovarium hypoplasia in the ultrasound. She uses daily 4000 anti-Xa IU / 0.4 mL low molecular weight heparin because of the existing Factor V Leiden homozygous and prothrombin gene homozygous mutation. During the sonographic examination at 12th weeks triamniotic trichorionic, gross fetal abnormality is not monitored, the pregnancy that is line with the nuchal translucent and nasal bone measurements week of pregnancy was in existence current pregnancy. In subsequent follow-up, the discordance between the fetus has been detected. Due to decreasing in the amniotic of the fetus in the development of the fetus is lack at 34th week and the pregnancy was terminated by caesarean section in emergency conditions. The babies have been delivered as breech, foot and head presentation in turn. Their weights were 2100, 1880 and 1980 gr in turn. In the postpartum period any additional problems have not been encountered and the patient was discharged from the hospital after the 2th day of operation. any complications did not observe in the early borned babies in neonatal period.

Discussion: Triplet pregnancies are the high maternal and neonatal morbidity pregnancies. Rates of diabetes, anemia, amniotic fluid abnormalities, pregnancy-related hypertension, eclampsia, cervical insufficiency, placenta previa, use of tocolysis, syndrome of twin- twin transfusion, preterm birth and cesarean section has been increased. To know the risks and complications that may occur in the triplet pregnancies helps to follow easier and improves the results

Keywords: Hypogonadotropic hypogonadism, triplet pregnancy, intra-uterin insemination, multiple pregnancy

[PP-080]

Assessment of cardiovascular risk factors and carotid artery intima media thickness (CIMT) in women with PCOS

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Objective: The objective of this study is to determine if CIMT (carotid artery intima media thickness) along with other cardiovascular risk factors as dyslipidemia and hyperhomocysteinemia differs in women

with PCOS (polycystic ovary syndrome) when compared to those of normal subjects and thereby to assess their cardiovascular risks.

Material and Methods: One hundred women diagnosed to have PCOS according to the 2003 Rotterdam criteria and 100 age-matched healthy controls were enrolled into the study. All women were examined by the same physician. The presence and the extend of hirsutism were assessed by FGS (Ferriman-Gallwey score). Serum FSH (follicle-stimulating hormone), LH (luteinizing hormone), E2 (estradiol), DHEAS (dehydroepiandrosterone sulfate), free T (testosterone) and total T, insulin, fasting plasma glucose, total cholesterol, HDL (high-density lipoprotein) cholesterol, LDL (low-density lipoprotein) cholesterol, triglyceride, homocysteine, fibrinogen, C-reactive protein were measured and CIMT of both carotid arteries was measured by the same experienced radiologist who was blinded to the clinical and biochemical data. FAI (Free androgen index) and IR as defined by HOMA-IR (homeostasis model assessment insulin resistance index) were calculated. Statistical analysis was performed by using SPSS (Statistical Packages for the Social Scienc-

Table 1. Baseline characteristics and hormone profiles of subjects

	PCOS (n=100)	Control (n=100)	P
Age (y)	24.84±5.4	25.19±4.53	0.62
BMI	25.88±3.91	25.1±3.89	0.14
FGS	17.6±5.6	4.0±1.0	<0.001**
FSH (IU/L)	5.49±3.6	5.67±3.34	0.88
LH (IU/L)	12.7±7.16	9.10±5.6	<0.001**
E2 (pg/mL)	69.4±41.35	71.61±49.4	0.73
Total T (nmol/L)	1.62±0.80	0.93±0.49	<0.001**
SHBG (nmol/L)	77.38±59.94	76.81±54.07	0.94
FAI	3.5±3.38	1.71±1.47	<0.001**
DHEAS (µg/dL)	292.11±110.54	238.98±93.33	<0.001**

Values are mean±standart deviation (SD).

BMI: body mass index; FGS: Ferriman-Gallwey score; PCOS: polycystic ovary syndrome; FSH: follicle-stimulating hormone; LH: luteinizing hormone; E2: estradiol; DHEAS: dehydroepiandrosterone sulfate; T: testosterone; SHBG: Sex hormone binding globulin; FAI: free androgen index ** Statistically highly significant (p<0.01).

Table 2. Metabolic, biochemical profile, cardiovascular risk factors and CIMT measurements in women with PCOS and control group.

	PCOS (n=100)	Control (n=100)	P
Homocysteine (µmol/L)	10.04±2.16	8.17±2	<0.001**
Total cholesterol (mg/dL)	200.05±36.28	187.74±36.07	0.017*
HDL cholesterol (mg/dL)	52.53±15.30	60.42±17.25	0.001**
LDL cholesterol (mg/dL)	95.20±25.62	81.66±18.63	<0.001**
Triglyceride (mg/dL)	128.37±37.93	115.89±32.66	0.013*
HOMA-IR	3.22±2.53	2.76±2.19	0.176
Right CIMT (mm)	0.51±0.12	0.43±0.07	<0.001**
Left CIMT (mm)	0.51±0.12	0.43±0.07	<0.001**
Mean CIMT (mm)	0.51±0.12	0.43±0.07	<0.001**

Values are mean±standart deviation (SD).

PCOS: polycystic ovary syndrome; CIMT: carotid artery intima media thickness; HOMA-IR: homeostasis model assessment insulin resistance index; HDL: high-density lipoprotein; LDL: low-density lipoprotein * Statistically significant (p<0.05) ** Statistically highly significant (p<0.01).

es) 18.0 (SPSS Inc.; Chicago, IL, USA). Data are presented as mean and standard deviation, comparisons in quantitative parameters between the PCOS and control groups were performed by unpaired t-test and a p value of <0.05 was considered to be significant.

Results: There was no statistically significant difference between the groups when age, BMI and IR were compared. However, homocysteine, total cholesterol, LDL and triglyceride levels were statistically significantly higher and HDL level was lower in the PCOS group. On top of that right, left and mean CIMT values were all higher in the PCOS group and the difference was statistically highly significant (Tables 1 and 2).

Conclusion: Metabolic dysfunction in women with PCOS leads to increased risk for CVD (cardiovascular disease) with an odds ratio of 2 to 3. In this study the results show a lower HDL and higher LDL, triglyceride, homocysteine and total cholesterol levels in PCOS subjects which reflects a more atherogenic state. Moreover, CIMT, which is a well-established index of atherosclerosis and which is strongly associated with increased risk of cardiovascular events, is statistically highly significantly increased in the PCOS group. Obesity and IR were not a factor in this increased CVD risk in our study as the BMIs of both groups did not differ and the HOMA-IRs were statistically similar. Therefore, it can be concluded that the CVD risk is increased in all women with PCOS and that they should all be counseled for a periodic risk assessment.

Keywords: Carotid artery intima media thickness, polycystic ovary syndrome, cardiovascular risk factors

[PP-081]

Endometriosis of episiotomy scar

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Objective: Endometriosis is defined as the presence of endometrial glands and stroma at extrauterine sites. These ectopic endometrial implants are usually located in the pelvis, but can occur nearly anywhere in the body. Perineal endometriosis is an occasional disease and mainly observed in the episiotomy scar

Case: A 34-year-old woman, G5 P2 Y2 A3 presented with a 10 years his-



Figure 1. Intraoperative picture of endometriosis



Figure 2. Postoperative picture of the perineal incision

tory of perineal pain and dyspareunia following vaginal delivery. Physical examination revealed a 4x5 cm sensitive, mobile lesion which is located on the right vulvar region within the episiotomy scar. We considered chronic abscess or scar endometriosis in the differential diagnosis. She had undergone complete surgical excision of a mass in the episiotomy scar. Pathological result was endometriosis. She was discharged without any complication and followed without any recurrence (Figure 1, 2).

Conclusion: Endometriosis should be considered in patients with a painful, palpable nodule near episiotomy scar. The complete excision of the lesion is the essential to provide cure and to prevent recurrence of the disease.

Keywords: Endometriosis, episiotomy, scar

[PP-082]

A randomized controlled trial comparing 10 mg dinoprostone pessary versus transcervical Foley catheter for labor induction

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Introduction: Labor induction is one of the most common procedures performed in obstetrics, reaching 10–20% of deliveries worldwide,

but its success depends largely on the condition of the uterine cervix. When induction of labor is necessary and the cervix is unripe, the obstetrician usually faces a challenge, considering that failed labor induction is a relatively frequent indication for cesarean section. Direct comparisons between prostaglandins and Foley catheters have been already performed. Nevertheless, there is still doubt regarding what would be the better choice for cervical ripening and labor induction. The purpose of this study is to compare the effectiveness and safety of 10 mg dinoprostone pessary versus transcervical Foley catheter for cervical ripening and labor induction in term pregnant women.

Material and Methods: This prospective, randomized study conducted at the Obstetrics and Gynaecology Department of Abant İzzet Baysal University Hospital between June 2012 and March 2016. The study was approved by Non-Invasive Human Research Ethics Committee. Inclusion criteria were a singleton and primigravid pregnancy at term, cephalic presentation with an unfavorable cervix. Case of membran rupture, multiparity, multiple gestations, non-cephalic presentation, previous cervical intervention or curettage, pregnancy loss after 12 weeks and gestation weight more than 4500 g were excluded.

In women assigned to proppess, a 10 mg controlled-release vaginal dinoprostone pessary was placed around the posterior cervix, through a digital vaginal exam for 12 hours. Thirty minutes after removing the pessary from the vagina, oxytocin was started.

In the other group, a 16-F Foley catheter inserted into the cervical canal under direct visualization after applying antiseptic solution then filled with 50 ml saline, strapped to the inner aspect of one leg on slight tension. Once the catheter was extruded, intravenous oxytocin infusion was initiated immediately. Each woman signed an informed consent prior to randomization. The primary outcomes were the length of induction-to-delivery period and the route of delivery. Normally distributed data were reported as mean±SD and abnormally distributed data as

median (IQR25; IQR75). $P<0.05$ was accepted as statistically significant.

Results: Demographic characteristics, labor induction and delivery results of two groups were given in Table 1. Although onset and final bishop scores and total time to delivery were same between the groups, degree of change in the bishop score was higher in the dinoprostone group ($p=0.012$). Cesarean delivery rate was higher in Foley group, but the difference did not reach statistical significance ($p=0.055$). Mean birth weight was also higher in Foley group ($p=0.035$).

Conclusion: The current study was undertaken in a single tertiary center to evaluate the effect of two different labor induction methods on labor outcomes. In the study, although time to delivery and route of delivery were found to be similar in both groups, bishop scores showed a greater increase in dinoprostone group. This is a prospective study including a small number of patients. Further prospective studies with more participants are required to investigate the differences between two induction methods.

Keywords: Dinoprostone, Foley catheter, labor induction

[PP-083]

What is the impact of aberrant endometrial cellular immunity on unexplained infertility?

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Objective: Implantation necessitates complex interactions among the developing embryo, decidualizing endometrium, and developing maternal immune tolerance and/or alterations in cellular and humoral immune responses. We aimed to investigate endometrial leukocyte subtypes and the some inflammatory cytokine plasma levels in infertile and fertile women.

Material and Methods: This case-control study was conducted with 80 women suffering from unexplained infertility and 40 fertile women. Peripheral venous blood samples and endometrial biopsies were taken on day 21 of the menstrual cycle. Plasma levels of interleukin-4 (IL4), IL6, IL10, tumor necrosis factor-alpha (TNFα), interferon-gamma (IFNγ), transforming growth factor-beta (TGFβ), IL17, IL35, and suppressor of cytokine signaling-3 receptor (SOCS3) were assayed by an enzyme linked immunosorbent assay. Endometrial cytotoxic T cell (CD8), natural killer cell (CD56) and macrophage (CD163) antigen stainings were analysed by immunohistochemical method. Statistical analysis was performed using SPSS version 16.0.

Results: The staining dominance of leukocyte subtype on endometrial biopsies was observed for CD8 antigen. The staining count of CD8 and CD56 antigens on endometrial biopsies of infertile group

Table 1. Comparison of the demographic characteristics, labor induction parameters and delivery results of two groups

Method	Dinoprostone (n=42)	Foley (n=43)	P value
Age (year)	24 (21.75; 29.25)	23 (21; 28)	0,380
Body Mass Index (kg/m ²)	29.02±5.32	29.32±4.58	0,782
Gestational age (week)	39.33±1.15	39.62±1.49	0.307
Cervical length (mm)	26 (23; 31.25)	29.6±8.9	0.305
Bishop score	Onset	3 (2; 4)	0,670
	Final	7 (6; 9)	0,058
	Degree of change	4 (3; 5)	0,012
Induction time (h)	12 (8; 12)	6(3; 12)	0,0004
Oxytocine time (h)	4,5 (0,8; 10,5)	10 (6; 13)	0,0002
Total time to delivery (h)	16.44 ± 7.07	18.46 ± 7.23	0,189
Route of delivery, n (%)			0,055
Vaginal	35 (83)	28 (65)	
Abdominal	7 (17)	15 (35)	
Birth weight (g)	2926 ± 433	3134 ± 465	0,035
APGAR	1. minute	8 (7; 9)	0,035
	5. minute	10 (9; 10)	0,045
Meconium, n (%)	2 (5)	0	

The normally distributed data were given as mean±SD, and abnormally distributed were given as median (IQR 25; IQR 75). Bold values indicate the significance of $p<0.05$.

was significantly higher than those of fertile group ($p<0.01$). On the other hand CD163 antigen staining count of infertile group was significantly lower than that of fertile group ($p<0.01$). The comparison of leukocyte subtype staining of infertile women according to whether or not they became pregnant revealed no significant differences. While the plasma SOCS3, IL35, and IL4 levels of the infertile group were significantly lower than those of the fertile group ($p<0.01$), the remaining cytokine levels were significantly higher in the infertile group ($p<0.01$). In the infertile group, the comparison of cytokine levels according to whether or not they became pregnant revealed no significant differences. TNFa/IL10, IFNg/IL10, IFNg/IL6, and IFNg/IL4 ratios were significantly higher in infertile group compared with those in the fertile group. None of the endometrial leukocyte subtypes showed correlation with implantation rate. On linear regression analysis; only plasma SOCS3 levels showed influence on endometrial CD163 staining count (OR=6.3, 95% CI=0.085-0.163, $p<0.01$).

Conclusion: Increased endometrial cytotoxic T cell and natural killer cells indicated an aberrant endometrial cellular immunity condition in infertile women. Also impaired cytokine ratios indicated the impaired humoral immunity condition in infertile women. It is not possible to show the major immunological factor(s) of unexplained infertility, but our findings point out that the decreased suppressor activity of the immune system may play a role in reproductive failure.

Keywords: CD56, CD8, CD163, endometrial leukocytes, unexplained infertility

[PP-088]

Association of platelet indices with endometrial cancer and precancerous lesions

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Objective: To evaluate the relationship of simple and widely available platelet indices to endometrial precancerous and cancerous lesions.

Material and Methods: Patients presented with abnormal uterine bleeding between pre- or postmenopausal age group admitted to Department of Obstetrics and Gynecology between January 2012 and May 2014 were included to the present study. Endometrial sampling of the patients were evaluated. Patients with endometrial hyperplasia (EH) or endometrial cancer (EC) were included in the study group. 134 patients were grouped according to biopsy findings as (a) endometrial hyperplasia without atypia, (b) endometrial hyperplasia with atypia, and (c) endometrium cancer. Control group of 50 individuals were taken from patients who had normal endometrial biopsy. Hemoglobin, hemotocrit, mean corpuscular volume (MCV), white blood cell count (WBC), platelet count (PLT), mean platelet volume (MPV), plateletcrit (PCT), neutrophil to lymphocyte (NLR), platelet to lymphocyte ratio (PLR), values of the patients were compared.

Results: Body mass index (BMI) and endometrial thickness was significantly increased in patients with endometrial precancerous and

Table 1. Comparison of the hematologic parameters of the four groups

	Control (n=50)	EH without atypia (n=50)	EH with atypia (n=24)	EC (n=10)	p
WBC (x10 ⁹ /mm ³)	7.06 (0.8-14.8)	7.22 (0.3-13.8)	7.08 (0.1-13.8)	8.59 (0.8-12.8)	0.718
RBC (x10 ¹² /mm ³)	4.86 (3.4-7.1)	4.78 (1.1-7.3)	4.77 (4.5-5.1)	4.98 (3.1-7.1)	<0.0001
Hb (g/dl)	12.9 (1.1-15.8)	12.8 (1.2-15.8)	12.8 (1.7-15.7)	12.8 (1.2-15.2)	0.953
Hct (%)	37.8 (7.3-54.1)	36.7 (6.3-54.1)	36.8 (6.3-54.1)	37.1 (6.3-54.1)	0.419
MCV (fl)	84.5 (22.8-102.5)	84.9 (22.8-102.5)	84.5 (22.8-102.5)	84.5 (22.8-102.5)	0.317
PLT (x10 ⁹ /mm ³)	225 (117-417)	204 (91-419)	204 (117-417)	187 (77-408)	<0.0001
MPV (fl)	9.4 (5.2-16.7)	9.4 (5.2-16.7)	9.5 (5.2-16.7)	9.5 (5.2-16.7)	0.889
PCT (%)	0.206 (0.123-0.309)	0.204 (0.109-0.322)	0.204 (0.109-0.322)	0.211 (0.123-0.309)	<0.0001
NLR (x10 ⁹ /mm ³)	1.56 (0.83-2.87)	1.56 (0.83-2.87)	1.56 (0.83-2.87)	1.56 (0.83-2.87)	<0.0001
PLR (PLT/L)	102.3 (49.2-181.8)	102.3 (49.2-181.8)	102.3 (49.2-181.8)	102.3 (49.2-181.8)	<0.0001

cancerous lesions compared to controls. A statistically significant difference was observed with regards to PLT, PCT, MPV, PLR, NLR between all four groups ($p<0.001$, $p<0.001$, $p=0.009$, $p<0.001$, respectively). In the dual comparisons of the groups the values of platelet indices were significantly higher in EC and EH-atypia groups than control and EH groups.

Conclusion: PLT, PCT, MPV, PLR and NLR might be used to define higher risk groups of cancerous or atypia. However further clinical studies are needed to evaluate their accuracy and usage.

Keywords: Endometrial cancer, endometrial hyperplasia, platelet indices

[PP-089]

Does anticoagulant therapy improve adverse pregnancy outcomes in patients with histories of recurrent pregnancy loss

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Objective: Recurrent pregnancy loss (RPL) is a serious problem in the reproductive age women. We aimed to study the role of anticoagulant therapy on pregnancy complications and perinatal outcomes in pregnant patients with histories of RPL.

Material and Methods: One hundred fifty-three pregnant, with RPL history and thrombophilia positivity, were grouped into two as 89 treated with anticoagulant therapy and 64 nontreated. Treated and untreated groups were compared for pregnancy complications, delivery weeks, abortion rates, fetal birth weights, APGAR scores, live birth rates, and newborn intensive care admission rates.

Results: Of the total 153 pregnant patients (63%) 97 developed pregnancy complications; 55 (56.7%) were in the untreated group and 42 (43.3%) were in the treated group, which was statistically significant ($p=0.003$). The differences in pregnancy complications were produced by differences in the numbers of IUGFs and anembryonic

Table 1.

Mutation	LMWH+ASA treated N(%)	Untreated N(%)
MTHFR homocystein	18 (20,2%)	14 (21,9%)
heterozygous	14 (22,2%)	34 (53,1%)
PT homocystein	0 (0%)	1 (1,6%)
heterozygous	4 (4,5%)	3 (4,7%)
FVL homocystein	2 (1,1%)	0 (0%)
heterozygous	2 (2,2%)	1 (1,6%)
Combined mutation	30 (33,7%)	18 (33,7%)
Total	89 (100%)	64 (100%)

Obstetric Complications	LMWH+ASA treated N(%)	Untreated N(%)
Intrauterin fetal demise (IUPD)	14(33,3 %)	31 (56,4 %)
Assisted pregnancy	6 (14,3 %)	17 (30,9%)
Gestational diabetes (GDM)	0 (21,4 %)	2 (3,6%)
Intrauterin growth retardation (IUGR)	3 (7,1%)	2 (3,6 %)
Preeclampsia	7 (16,7%)	2 (3,6%)
Abnormal placenta	1 (2,4 %)	6 (10 %)
Placenta previa	2 (4,8 %)	1 (1,8 %)
Total	42 (100%)	55 (100%)

	Odds ratio	95,0% C.I. for EXP(B)		P-value
		Upper	Lower	
Step Age	0,974	0,487	0,965	1,049
Abortion history	1,471	0,159	0,859	2,520
Combined mutation(1)	1,766	0,137	0,834	3,741
Constant	1,278	0,850		

fetuses among the groups. The average neonatal birth weights of infants whose mothers had taken LMWH + ASA were significantly higher ($p=0.011$). The prematurely delivered infants were admitted to the neonatal intensive care unit (NICU), and the NICU requirements were not statistically different between the groups ($p=0.446$). However, live birth rates were significantly higher in the treated group than in the untreated group ($p=0.001$)

Conclusion: Anticoagulant therapy improves pregnancy complications and live birth rates in patients with RPL and hereditary thrombophilia.

Keywords: Anticoagulant therapy, hereditary thrombophilia, recurrent pregnancy loss

[PP-090]

Are there any differences between the distribution of placental bed leukocyte subtypes of preeclamptic and healthy pregnant?

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Objective: Preeclampsia (PE) is associated with impaired decidual leukocyte and plasma cytokine balance compared with normal pregnancy. We aimed to investigate maternal plasma levels of interferon-gamma (IFN-g), tumor necrosis factor-alpha (TNF-a), transforming growth factor-beta (TGF-b), interleukin-4 (IL4), IL6, IL10, IL17, IL35, suppressor of cytokine signalling-3 receptor (SOCS3) and placental bed leukocytes in preeclamptic and healthy pregnant.

Material and Methods: This study was conducted with 40 preeclamptic and 40 normotensive pregnant. Plasma cytokine levels were studied with enzyme-linked immunosorbent assay. CD8 antigen for cytotoxic T cell, CD56 antigen for natural killer cell and CD163 antigen for macrophages were analysed by immunohistochemical study on placental bed biopsies.

Results: In preeclamptic women; IFN-g and TGF-b levels were significantly higher and IL-35 levels were significantly lower than those of controls. CD8, CD56 and CD163 positivity of preeclamptic group were not significantly higher than those of controls. CD8 staining showed negative correlation with plasma IL17 levels. CD163 staining showed negative correlation with TNF-a/IL4 ratio. TNF-a/IL4 ratio showed minimal influence on placental bed CD163 staining.

Conclusion: Slightly increased placental bed CD8, CD56 and CD163 positive leukocytes and increased plasma IFN-g, TGF-b and decreased plasma IL35 levels of preeclamptic pregnant indicate an aberrant cell mediated immunity in PE. We could not say yet that this condition is whether result or reason. New studies are needed to discuss our results.

Keywords: Cellular immunity, cytokine, endometrial leukocytes, preeclampsia

[PP-094]

A different compression technique reinforced with Bakri Balloon in pelvic floor hemorrhage after postpartum hysterectomy refractory to conventional method: A case report

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Objective: The aim of this case report was to introduce an effective but seldom used technique.

Case: A 32 years-old, 34 weeks pregnant women (G3, P2) who underwent cesarean section under general anesthesia for placental abruption, preeclampsia and in utero mort de fetus. Patient was referred to Zeynep Kamil Training and Research Hospital after development of DIC and anuria because of uncontrollable bleeding after cesarean section at postop 6th hours. Blood pressure was 60/40 mmHg, pulse was filiform and 150 per minute. Hemoglobin: 4.2 g/dL, Plt: 42.000, fibrinogen: 70 mg/dL, and INR: 2. Bilateral hypogastric artery ligation, B-Lynch suture were performed via laparotomy and there was no intra-operative bleeding. The operation was finished without any complication. At postoperative 6th hour, active bleeding was observed from drains of patients (2000 cc/hour) and second laparotomy was performed. Because of profuse bleeding hysterectomy and pelvic packing with surgical compress to achieve hemostasis to provide a longer period of compression was performed. At the postop 1st hour, total drained fluid volume was 1500 cc at the fluid collection bags, and a third laparotomy was performed. Five surgical compresses were fixed each other circularly. The Bakri Balloon was filled with 500 cc sterile saline and placed at the central of the circular shaped surgical compress. 'Compression Technique Reinforced with Bakri Balloon' was used for the patient who did not respond to any conventional surgical and medical intervention. The drainage channel of the balloon was placed out from the vaginal cuff. After achieving hemostasis, the operation was completed. Persistent traction was provided by attaching the balloon shaft to leg of patient. The patient was followed at the intensive care unit for close monitoring. Total 16 units (U) erythrocyte suspension, 14 U fresh whole blood, 28 U fresh frozen plasma, 100 U platelets were transfused and 20 gr fibrinogen, 16 gr recombinant FVIIa, 1500 mg tranexamic acid were administered intraoperatively and postoperatively. There was total 800 cc serohemorrhagic fluid at the fluid collection bag and there was minimal vaginal bleeding during the postoperative period. At the postoperative 36th hours, fourth laparotomy was performed and there was no intraabdominal bleeding. Bakri Balloon and surgical compresses were removed, then abdomen was closed. Patient was followed 12 days at intensive care unit and hemodialysis treatment was performed during 21 days because of acute tubular necrosis. Patient was discharged from the hospital on postoperative day 40 in stable condition.

Conclusion: 'Compression Technique Reinforced with Bakri Balloon' was provide more effective mechanic compression on the larger area than only use of Bakri Balloon. The limitation of this technique is requiring an additional laparotomy to remove the surgical compress after achieving hemostasis. This technique can be used for the manage-

ment of the patients who did not respond to any conventional surgical and medical intervention for uncontrollable postpartum bleeding which can cause to DIC.

Keywords: Bakri ballon, postpartum hemorrhage, compression technique

[PP-095]

Risk factors for hysterectomy among patients with placenta previa totalis

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Objective: To assess risk factors for hysterectomy among patients with placenta previa (PP) totalis.

Material and Methods: The medical records of all patients delivered by cesarean section (CS) for PP totalis were retrospectively reviewed. Eligible cases were divided into those who underwent peripartum hysterectomy (PH) and those who did not. The two groups were compared in terms of demographics, operative features and perinatal outcomes. Logistic regression analysis was used to identify risk factors associated with hysterectomy.

Table 1. The demographics features and clinical findings of the patients

	Hysterectomy group (n: 43)	Conservative managed group (n: 61)	P
Age (years)	33.0±3.9	31.1±4.7	0.029
BMI (kg/m ²)	28.7±3.8	27.9±3.5	0.262
Gravidity	3 (2-9)	3 (1-8)	0.014
Parity	2 (1-4)	1 (0-5)	0.001
D&C	0 (0-5)	0 (0-4)	0.073
Abortion	0 (0-5)	0 (0-5)	0.387
Alive	2 (0-4)	1 (0-5)	0.002
Previous C-section	2 (0-3)	0 (0-4)	0.000
Gestational week at birth	36 (24-38)	37 (27-39)	0.005
Birth weight (gr)	2730 (470-3410)	2870 (680-4500)	0.038
Apgar 5	9 (0-9)	9 (5-9)	0.651
Preoperative Hb (g/dL)	11.5±1.4	11.6±1.1	0.640
Preoperative Hct (%)	34.2±4.2	34.7±2.9	0.411
Postoperative Hb (g/dL)	9.9±1.4	10.3±1.1	0.077
Postoperative Hct (%)	29.9±4.2	31.0±3.3	0.006
Lowest detected Hb (g/dL)	8.2±1.5	9.7±2.1	0.262
Bakri inflation volume (cc)		186.2±64.9	

BMI: body mass index; D&C: dilatation and curettage; Hb: hemoglobin; Hct: hematocrit
Data presented as mean±standard deviation and median (minimum-maximum).
P<0.05 is considered as statistically significant.

Logistic regression model for risk factors of peripartum hysterectomy in case of PP totalis

Outcome: hysterectomy	β	S.E.	Wald	P	OR	95% CI
Age ≥ 31	3.851	1.297	8.809	0.003	47.035	3.698-598.165
No. of previous C-section ≥ 2	3.357	1.406	5.700	0.017	28.692	1.824-451.293
No. of live children ≥ 2	2.704	1.486	3.311	0.069	14.942	0.812-275.007
Anterior located placenta (+)	1.808	1.000	3.267	0.071	6.101	0.859-43.349
Preop blood transfusion (+)	3.203	1.576	4.131	0.042	24.618	1.121-540.552
Abnormal Placental invasion (+)	4.730	1.325	12.739	0.000	113.333	8.434-1522.235

SE; standard error, OR; odds ratio, CI; confidence interval. P<0.05 is considered statistically significant

Table 2. Distribution of the categorical variables between the two groups

	Hysterectomy group (n: 43)	Conservative managed group (n: 61)	P
Age ≥ 31	36 (83.7)	32 (52.5)	0.001
BMI ≥ 28.5	26 (60.5)	24 (39.5)	0.034
Gravidity ≥ 3	37 (86)	36 (59)	0.003
Parity ≥ 2	31 (72.1)	25 (41)	0.002
Alive ≥ 2	28 (65.1)	23 (37.7)	0.006
Previous C-section ≥ 2	25 (58.1)	11 (18)	0.000
Smoker	5 (11.6)	5 (8.2)	0.562
GW at birth ≤ 36	31 (72.1)	27 (44.3)	0.005
Male gender	20 (46.5)	32 (52.5)	0.550
IUGR	3 (7)	4 (6.6)	1.000
Complication	6 (14)	0	0.004
NICU admission	10 (23.3)	11 (18)	0.513
Perinatal mortality	1 (2.3)	3 (4.9)	0.641
Placenta location			
Anterior	34 (79.1)	17 (27.9)	
Posterior	9 (20.9)	44 (71.1)	0.000
Preop tx	42 (97.7)	22 (36.1)	0.000
Postop tx	28 (65.1)	12 (19.7)	0.000
Urgency of operation	7 (16.3)	14 (23)	0.404
Abnormal Placental invasion	40 (93)	10 (16.4)	0.000

BMI: body mass index; GW: gestational week; IUGR: intrauterine growth restriction; NICU: neonatal intensive care unit; Tx: transfusion
Data are presented as n (%). P<0.05 is considered statistically significant.

Results: PH was performed in 43 (44.7%) patients with PP totalis. Referral patients were older when compared with those without hysterectomy (p: 0.029). The median values for gravidity, parity, number of live children and previous CS were statistically significantly higher in the hysterectomy group (all p<0.05). Perioperative need for blood transfusion, anterior previa and abnormal placental invasion were statistically significantly more frequent in the hysterectomy group (p<0.001). Intraoperative complication rate was higher in this group, and bladder injury was the most common complication. No significant differences were observed between the groups in terms of perinatal outcomes. In binomial logistic regression analysis; advanced maternal age (≥ 31 years), number of previous CS (≥ 2), preop-

erative need for blood transfusion, and abnormal placental invasion were found to be independent risk factors for PH in patients with PP totalis.

Conclusion: The findings of this study suggest that placenta accreta, advanced maternal age, increased number of previous CS, and increased need for blood transfusion are important risk factors for PH in patients with PP totalis.

Keywords: Placenta previa, placenta accrete, peripartum hysterectomy, Cesarean section

[PP-096]**Impetigo herpetiformis: A rare pregnancy dermatoses**

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Introduction: Impetigo herpetiformis (IH) is one of the pregnancy specific dermatoses. Generally, it appears in the second half of the pregnancy. Its importance for obstetricians is that impetigo herpetiformis increases the mortality and morbidity for both mother and fetus. Here, we present a case of impetigo herpetiformis which began in third trimester and couldn't be treated with oral corticosteroids.

Case: A 27 year old, gravida 4 parity 3, woman at her 31st week of pregnancy admitted to our clinic with itchy, erythematous pustular and macular lesions covering her neck, face, trunk, extremities, abdomen, groin, genital region, back and axillae. She had also erythematous plaques and fissures on her tongue. Skin lesions firstly appeared on her neck about 4 weeks ago, and then covered her body. It was learned that these kinds of lesions were seen in her previous pregnancies. Her diagnosis was decided according to skin biopsy result.

Oral prednisolone was given as initial treatment but the skin lesions progressed. Than prednisolone was stopped and oral fluocortolone was given. Despite the treatment, skin lesions enlarged and serum albumin level decreased. Fetal ultrasound exam revealed that amniotic fluid index and umbilical artery Doppler measurements were normal, but there was intrauterine growth restriction. Patient was delivered by the cesarean section because of the increased risk of mortality and morbidity for the mother and the fetus. After the delivery, skin lesions worsened.

Discussion: Impetigo herpetiformis is one of the pregnancy specific dermatoses. It tends to repeat in later pregnancies. Generally IH appears in the third trimester. Because of the risk of the recurrence,

patients who have IH in previous pregnancies should be warned and followed closely. Fetal complications are related to placental insufficiency. Stillbirth and early neonatal death can be seen. IH's diagnose and treatment is crucial for patients because of increased mortality and morbidity rates. The patient must be followed closely and management must be arranged according to the patient.

Keywords: Impetigo herpetiformis, pregnancy specific dermatose

[PP-097]

A rare case of leiomyosarcoma originating from the left round ligament of the uterus

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Introduction: Uterine leiomyosarcomas (LMS) are rare malignancies with a poor prognosis. The incidence is reported to be 3–7/100,000 per year. Preoperative and intraoperative differentiation between LMS and large leiomyoma is always challenging. Therefore, LMS are often diagnosed during postoperative histologic evaluation of hysterectomy or myomectomy specimens. LMS of the round ligament of the uterus which can represent as an inguinal or pelvic mass is extremely rare. To our knowledge, there is only one case report of LMS arising from the round ligament available in the literature. Herein, we aimed to present the second case of LMS originating from the left round ligament of the uterus in a premenopausal woman initially misdiagnosed as an ovarian tumor.

Case: A 43-year-old woman (gravida 4, parity 4) applied to our outpatient clinic with a complaint of abdominal pain and distension since 3 months. Her past medical and family histories were unremarkable. She was menstruating regularly. Pelvic examination disclosed a solid, immobile mass in the left adnexal localization, extending to over the umbilicus. On ultrasonographic examination, an anteverted uterus with an endometrium thickness of 8 mm and homogenous myometrium were observed. The ovaries could not be visualized, and the mass filling the left adnexal region and whole abdomen displaced the uterus to the right side. The round mass with heterogeneous internal echogenicity was measured at 19 cm diameter on the ultrasound scan. An amount of free fluid collection was also detected in the pouch of Douglas. Complete blood count values and other laboratory test results including tumor markers were unremarkable. Moreover, endometrial biopsy and Pap smear test results were also normal. An exploratory laparotomy was performed, and approximately 25 cm solid mass arising from the left round ligament was observed during the operation (Figure 1). The result of the intraoperative frozen section was reported as malignant. Therefore, the patient who does not desire fertility underwent complete surgical staging, including total abdominal hysterectomy, bilateral salpingoopherectomy, lymphadenectomy, appendectomy, and omentectomy. Her postoperative course was uneventful. On histologic examination, more than 3 mitotic figures were observed in the field at 40x magnification (Figure 2). Histopathology was reported as LMS.

Conclusion: LMS of the round ligament of the uterus are extremely rare malignancies. They may be present with a pelvic or inguinal (extra pelvic) mass depending on which part of the round ligament



Figure 1. Intraoperative image of the mass

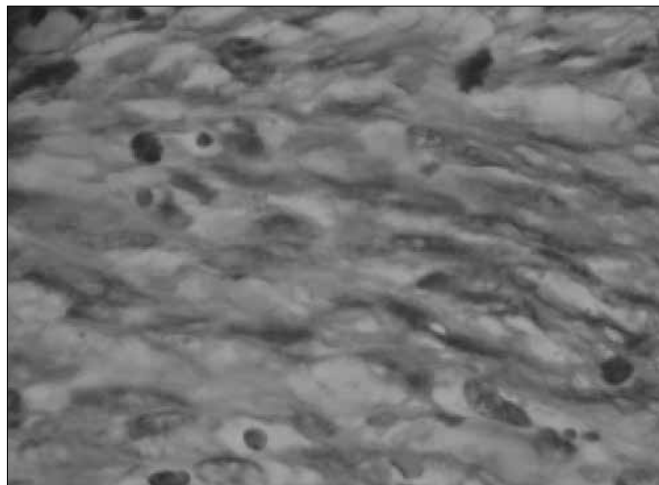


Figure 2. Histopathological evaluation by light microscopy H&E (40X)

involved. LMS can also occur without any risk factors. However, a rapidly growing, large and solitary uterine mass may be a sign of uterine sarcoma, even though in women of reproductive age.

Keywords: Round ligament, uterine leiomyosarcoma, premenopausal woman

[PP-098]

Hidradenoma papilliferum of the vulva

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Hidradenoma papilliferum (HP) is a rare, benign tumor that commonly affects the anogenital area. And also originated from mammary-like anogenital glands.

A 27-year-old female patient was admitted to our gynecology department with the complaints of palpable mass on vulva. Examination revealed a well-circumscribed, 1x1 cm nodular lesion with smooth regular surface which located at interlabial sulcus. Excisional biopsy was performed and histopathological examination reported as hidradenoma papilliferum.

Hidradenoma Papilliferum is may be derived from the anogenital glands and exhibits both apocrine and eccrine differentiation. And these glands bear a resemblance to mammary glands and recently

defined as mammary-like anogenital glands. HPs are preponderantly located in the interlabial sulcus. Furthermore, HP can be a predisposing factor for Bartholin's abscess or cyst development due to obstruct the Bartholin's gland drainage. In practice, clinicians should consider HP while examining vulvar nodular lesion especially located in the interlabial sulcus.

Keywords: Hidradenoma papilliferum, anogenital mammary-like gland, vulva

[PP-099]

Serum tumor markers for preoperative discrimination of benign and malignant adnexal masses

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Objective: According to Centers For Disease Control And Prevention and National Cancer Institute's 2015 year datas, about 20.000 women get ovarian cancer in United States each year. Ovarian cancer is 8th most common malignant tumor and the 5th most common cause of cancer death in females in US. It is the most fatal cancer of the female reproductive system cancers. 14.404 women died because of ovarian cancer in US in 2012. Preoperative benign/malignant distinction of the adnexal masses is a important point in management of the patients. For this purpose, the studies research tumor markers' determination separately and combined (4, 5). In our study, we aimed to detect discrimination malign/benign in adnexal masses by using preoperative

serum CA125, CA19-9, CA15-3 levels, separately and combined.

Material and Methods: Medical data of 321 patients operated because of adnexal masses between 2009-2014 years were retrospectively analyzed. Cut off values of CA125, CA19-9 and CA15-3 were received respectively 35U/mL, 35U/mL and 31U/mL. Tumor markers were evaluated separately and combined. SPSS 15.0 for Windows program was used to statistical analysis. Descriptive statistics were expressed as average, standard deviation and median for quantitative variables. The comparison of the independent groups were performed via Mann-Whitney U analysis. In the independent groups, rate comparison were realized by using Chi-square analysis. The relationship between the quantitative variables were analyzed via Spearman Correlation test when parametric test conditions didn't provided. Statistically, alpha significant rate was accepted $p < 0.05$.

Results: Median age was 43 years. 68.5% of patients were premenopausal and 31.5% of patients were postmenopausal. In patients of 29.8% CA125, 16.3% CA 19-9 and 6.1% CA 15-3 levels were found to be elevated than cutoff value. In postmenopausal group, the malignancy rate of CA 125 and CA 15-3 were significantly higher (respectively $p=0.021$, $p=0.002$). In malignant cases, CA 125 and CA 15-3 were significantly higher ($p < 0.001$). Sensitivity, specificity, PPV, NPV and ACC of CA125 were 70.5%, 76.6%, 32.3%, 94.2% and 75.8%, respectively. Sensitivity, specificity, PPV, NPV and ACC of CA15-3 were 34.1%, 98.2%, 73.7%, 90.8% and 89.8%, respectively. There was no difference between groups for CA 19-9. The determination of combined tumor markers was detected. ACC of combined CA125+CA15-3 was 90.7%.

Despite several studies performed to detect preoperative benign/malignancy differentiation ability of tumor markers' combination, this is still unclear issue. No combination is exactly recommended yet. However, we consider that, some combinations would be beneficial (2, 3, 4, 5, 6, 9, 11). In our study, the highest diagnostic accuracy rate was seen in combination of CA125 and CA15-3. But this combination's role in discrimination between benign and malignant ovarian tumors is few and unimportant. Similarly, Bozkurt et al. have applied different combinations of CA125, CA19-9, CA15-3 and CEA, and concluded that these combinations didn't contribute to diagnostic accuracy.

Elevated values of CA125 and CA15-3 statistically significantly contribute to benign/malignancy discrimination of adnexal masses, however contribute to diagnostic accuracy of combinations is limited. CA19-9 have not to be used for this aim. Especially, we have to approach more carefully to postmenopausal patients with high CA125 and CA15-3.

Keywords: Tumor markers, adnexal mass, ovarian cancer, diagnostic accuracy

Table 1. Preoperative determination of tumor markers

	Sensitivity	Specificity	PPV	NPV	ACC
CA125	70.5%	76.6%	32.3%	94.2%	75.80%
CA19-9	30.2%	85.90%	25.0%	88.8%	78.40%
CA15-3	34.1%	98.20%	73.7%	90.8%	89.80%
CA125+CA15-3	34.1%	99.3%	87.5%	90.9%	90.7%

BMI: body mass index; D&C: dilatation and curettage; Hb: hemoglobin; Hct: hematocrit
Data presented as mean±standard deviation and median (minimum–maximum).
 $P < 0.05$ is considered as statistically significant.

Table 2. Preoperative tumor marker levels for tumor types

	Pathology Benign	Malignant	
U/mL	Average±SD/Min.-Max./Median	Average±SD/Min.-Max./Median	p
CA125	36.4±78.4/0.6-1053/15	624.7±1362.8/3.3-7170/59.8	<0.001
CA19-9	68.0±146.4/0-705.9/14.5	68.0±146.4/0-705.9/14.5	0.5
CA15-3	14.6±16.2/0-193.2/12.9	78.5±211.9/3.3-1306/21.2	<0.001

BMI: body mass index; D&C: dilatation and curettage; Hb: hemoglobin; Hct: hematocrit
Data presented as mean±standard deviation and median (minimum–maximum). $P < 0.05$ is considered as statistically significant.

[PP-103]

Investigation of maternal, cord blood erythropoietin and copeptin levels in low-risk term deliveries complicated by meconium stained amniotic fluid

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Objective: To compare maternal, cord blood erythropoietin (EPO) and copeptin levels in low risk term deliveries which are complicated by meconium stained amniotic fluid (MSAF) to those with clear amniotic fluid. Also to evaluate the relations between these markers and cord blood pH values.

Material and Methods: Low-risk term pregnant women with MSAF at an active phase of labor were defined as the study group (n=39). Pregnant women with clear amniotic fluid were selected for the control group (n=41). The two groups were matched for age, body mass index and gestational age. Maternal, cord blood EPO and copeptin levels with cord blood pH values were also measured.

Table 1. Comparison of clinical laboratory characteristics between pregnant women with MSAF and clear amniotic

Variables	Meconium stained group (n:39)	Control group (n:41)	Pvalue
Age (years)	26.6±5.6	26.5±5.5	0.965
Body mass index (kg/m ²)	30.4±3.8	30.1±7.0	0.796
Gravida	2(1-5)	2(1-6)	0.920
Parity	1(0-3)	1(0-4)	0.802
Gestational age (weeks)	40.0(37.0-41.6)	39.4(37.1-41.2)	0.094
Labor duration (minutes)	185.8±164.7	169.2±131.7	0.620
Birth weight (g)	3241.2±399.1	3223.1±508.6	0.860
Loss of variability	10(25.6)	5(12.5)	0.137
Recurrent Deceleration	6(15.4)	0	0.010
Oxytocin Induction	17(43.6)	14(35.0)	0.434
C-section	9(23.1)	2(4.9)	0.024
Supplemental Oxygen	10(25.6)	0	0.001
APGAR1	8(5-9)	8(6-8)	0.522
APGAR5	10(6-10)	10(8-10)	0.263
pH	7.25±0.05	7.34±0.04	<0.001
MB-EPO	42.6±9.0	40.7±9.2	0.367
CB-EPO	134.2(20.5-834.6)	38.4(10.3-114.2)	<0.001
MB-Copeptin	4.9(0.1-31.1)	4.0(3.1-28.4)	0.004
CB-Copeptin	4.7(2.6-25.5)	3.6(2.0-23.2)	<0.001

MB; maternal blood, CB; cord blood, EPO; erythropoietin. Values are presented as mean ± standard deviation, number (percent), and median (minimum - maximum) P<0.05 statistically significant.

Results: Maternal, cord blood EPO and copeptin levels of study and control groups were 42.6±9.0 vs. 40.7±9.2, 134.2(20.5-834.6) vs. 38.4(10.3-114.2), 4.9(0.1-31.1) vs. 4.0(3.1-28.4), and 4.7(2.6-25.5) vs. 3.6(2.0-23.2), respectively. The differences were statistically significant for cord blood EPO, maternal and cord blood copeptin levels (p<0.001, p=0.004, p<0.001, respectively). The study group had a statistically and significantly lower cord blood pH values (7.25±0.05 vs. 7.34±0.04, p<0.001). Moreover, cord blood EPO and maternal and cord blood copeptin levels were inversely correlated with cord blood pH values in the study group (p<0.001, p=0.005, and p=0.009, respectively).

Conclusion: We suggest that higher cord blood erythropoietin and maternal and cord blood copeptin levels may be an indicator of fetal acidosis in low-risk term deliveries complicated by MSAF.

Keywords: Acidosis, copeptin, erythropoietin, fetal hypoxia, meconium

[PP-104]

Maternal serum Vitamin D levels in pregnancies complicated with congenital diaphragm hernia

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Objective: Vitamin D (VD) deficiency is a common public health problem worldwide in all age groups. Receptors and enzymes related to VD metabolism have been shown in many cells and tissues of the body. VD plays a crucial role in cellular growth and differentiation during embryogenesis. It has been suggested that VD deficiency may be associated with various diseases, and that lower maternal serum levels may be associated with adverse perinatal outcomes. In this study we aimed to compare serum VD levels of pregnant women whose pregnancies complicated by congenital diaphragm hernia (CDH) with healthy pregnant women. We also evaluated perinatal outcomes of these pregnancies.

Material and Methods: Total of 77 patients was included in this prospective and cross sectional case-controlled study. 24 pregnant women having a fetus with CDH diagnosed prenatally formed the study group, and 53 healthy pregnant women were eligible for the control group. Demographics and clinical characteristics of the cases with some laboratory parameters were recorded.

Results: No significant differences were observed between two groups in terms of demographics and clinical features. Mean maternal serum VD levels were significantly lower in the study group than in the controls (p:0.019). Ionized calcium and corrected calcium levels were also found to be lower in pregnant women with CDH (p<0.001). Moreover, the calcium rich dietary habits were also more common in the study group (p<0.05).

Table 2. Correlation analysis between cord blood Ph levels and biochemical markers in the study group

	MB-EPO		CB-EPO		MB-Copeptin		CB-Copeptin	
	r	p	r	p	r	p	r	p
pH	-0.089	0.434	-0.437	<0.001	-0.311	0.005	-0.290	0.009

R; correlation coefficient. P<0.05 statistically significant.

Table 1. Demographics and clinical features of the cases

	Study group (n: 24)	Control group (n: 53)	p
Age (years)	26.4±5.7	27.0±5.1	0.666
BMI (kg/m ²)	26.3±4.8	26.3±3.9	0.954
Vitamin D (ng/mL)	7.3±6.0	11.6±7.4	0.019
Ca (mg/dL)	8.8±0.6	9.3±0.4	<0.001
Albumin (g/dL)	3.9±0.5	3.6±0.3	0.048
Corrected Ca	8.9±0.7	9.6±0.3	<0.001
Total protein (g/dL)	6.7±0.9	6.3±0.7	0.087
Gestational age (weeks)	22.1±3.8	22.5±4.3	0.996
Gravida	2 (1-4)	2 (1-5)	0.164
Parity	1 (0-3)	1 (0-3)	0.122
Alive	1 (0-3)	1 (0-3)	0.160
Smoking n (%)	3 (12.5)	5 (9.4)	0.687
Closed clothing n (%)	18 (75)	34 (64.2)	0.346
Milk n (%)	9 (37.5)	36 (67.9)	0.012
Yoghurt n (%)	12 (50)	40 (75.5)	0.027
Consanguinity n (%)	3 (12.5)	3 (5.7)	0.369
Localization of CDH n (%)			
Left	20 (83.3)		
Right	4 (16.7)		

BMI: body mass index; Ca: calcium; CDH: congenital diaphragma hernia
A p value <0.05 is considered as statistically significant.

Conclusion: Maternal serum VD and calcium levels were significantly lower in pregnancies complicated by CDH than healthy pregnant women. Hipovitaminosis D may play a role in the pathogenesis of CDH.

Keywords: Congenital diaphragma hernia, vitamin D, calcium, calcium-rich dietary

[PP-105]

Anterior placenta previa is associated with increased umbilical cord blood hematocrit levels

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Objective: We aimed to evaluate the umbilical cord blood (CB) hematocrit (Hct) levels in women with anterior located placenta previa (PP).

Material and Methods: This is a prospective case-control study performed in a tertiary level maternity hospital. Thirty seven pregnant women diagnosed with anterior PP (study group) and 37 women without PP (control group) included into the study. Groups were matched with regard to age, gestational age, and fetal gender. All women underwent Cesarean section. Umbilical CB Hct levels of the

Table 1. The demographic, clinical and laboratory characteristics of the patients

	Study group (n: 37)	Control group (n: 37)	p
Age	32.7±4.7	30.6±5.1	0.081
Gestational week	36.1±1.2	36.5±1.2	0.144
No. of previous C-section	1 (0-2)	1 (0-2)	0.477
Gravidity	3 (1-4)	3 (1-5)	0.765
Parity	1 (0-3)	1 (0-3)	0.055
D&C	0 (0-2)	1 (0-2)	0.184
No. of live children	1 (0-3)	1 (0-3)	0.072
Preop-Hgb/Hct	11.3±1.2/34.3±3.4	11.8±1.4/35.5±3.8	0.119/0.136
Postop-Hgb/Hct	9.8±1.3/29.3±3.9	10.8±1.2/32.9±3.7	0.003/0.000
Lowest Hgb	8.9±1.3	10.2±1.3	0.000
Birth weight	2870±536	3045±476	0.147
Weight	75.4±11.9	78.1±14.2	0.375
Height	161.8±5.4	161.7±5.7	0.984
BMI	28.8±4.7	29.9±5.7	0.383
Emergency	14 (37.8)	19 (51.4)	0.242
Complication	6 (16.2)	0	0.013
Apgar 5th minute	8.6±0.7	9.0±0.0	0.002
Newborn gender			
Male	22 (59.5)	19 (51.4)	
Female	15 (40.5)	18 (48.6)	0.483
NICU	7 (18.9)	0	0.006
Smoker	4 (10.8)	7 (18.9)	0.327
ART pregnancy	1 (2.7)	0	1.000
Tx of Blood products			
Preop-ES	2.3±2.1	0	
FFP	1.4±1.6	0	
Postop-ES	1.0±1.5	0	
FFP	0.3±0.7	0	0.000
Cord blood Hct	52.6±5.0	47.5±5.0	0.000

C-section: Cesarean section; D&C: dilatation and curettage; Preop: preoperative; postop: postoperative; Hgb: hemoglobin; Hct: hematocrit; BMI: body mass index; NICU: neonatal intensive care unit; ES: erythrocyte suspension; FFP: fresh frozen plasma; ART: assisted reproductive technology A p value <0.05 is statistically significant.

newborns were measured. Demographics, operative features, and neonatal outcomes were recorded.

Results: Umbilical CB Hct levels were statistically significantly higher in the PP patients compared with controls (p:52.6±5.0 vs. 47.5±5.0, p: 0.000). Preoperative maternal hemoglobin (Hgb) and Hct levels were similar in the two groups. However, postoperative Hb and Hct levels were significantly lower in the study group (p: 0.003, p: 0.000, respectively). Intraoperative complication rates were higher in this group. Neonatal Apgar scores were lower and neonatal intensive care unit admission was more common in the PP group when compared with controls.

Conclusion: We think that anterior PP is associated with increased umbilical CB Hct levels. Neonatologists should consider this condition in the infants born to mothers with anterior PP.

Keywords: Placenta previa, Cesarean section, cord blood, fetal hypoxia, hematocrit

[PP-106]

Assesment of the consistency between frozen and paraffin section examination of borderline over tumor

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Objective: Assesment of the consistency between frozen and paraffin kkksection examination of borderline ovarian tumor

Material and Methods: 47 patients with borderline over tumor in the frozen section examination were included to study. Demographic, clinical characteristics and paraffin section results of all patients were abstracted from hospital database. The consistency between results of frozen and paraffin section examination were assessed.

Results: The mean age of the patients were 40.7 ± 12.23 SD according to frozen section results 66% of patients were serous (n=31), 29.8% were musinous (n=14). 1 mixt (endometrioid, serous). There was inconsistency between results of frozen and paraffin section examination in 12.8% of (n=6) patients. No significantly differences were observed in terms of ca 125 levels, age and tumour size between cases with consistency and inconsistency. 6.5% of serous borderline tumour, 21.4% of mucinous borderline tumour showed inconsistency. There was no statistically significant difference between the two groups.

Conclusion: In present study, the discrepancy between frozen and paraffin section examination of the borderline over tumor was 12.8%. Our results were similar with previous study in the literature.

Keywords: Accuracy, borderline ovarian tumor, frozen section

[PP-109]

Treatment of intraabdominal hemorrhage with a Foley catheter

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Objective: An analysis of the results of transvaginal Foley catheter application, a minimally invasive intervention that could be used in the follow-up and treatment of intraabdominal hemorrhage.

Material and Methods: This study analyzed 22 patients who were treated using vaginal application of Foley catheter into the Douglas with the preliminary diagnosis of intraabdominal hemorrhage. Among the patients, 16 were on oral anticoagulant treatment due to cardiac valve replacement operations and they were considered to have intraabdominal bleeding secondary to ovulation or hemorrhagic cyst rupture. The remaining six patients had undergone subtotal hysterectomy due to uterine atony at another center and intraabdominal fluid was detected upon ultrasonography (USG). All patients underwent culdocentesis and the intraabdominal fluid was confirmed to be non-coagulating blood. All the patients had low levels of hemoglobin (Hb) and blood transfusions were performed. Transvaginal Foley catheter

placement in the lithotomy position was performed in patients with stable Hb values after blood transfusion. A speculum was inserted to the vagina, and the posterior lip of the cervix was grasped with a tenaculum. A posterior traction to the cervix was applied and an incision measuring approximately 3 mm was performed in the posterior fornix using a blade number 11. Under sterile conditions, a 16-F Foley catheter was placed into the Douglas through the incision. The balloon of the catheter was inflated with 10 mL physiologic serum. The catheter was left in place between 24-48 hours until the fluid flow stopped. Subsequently, the patients again were put in the lithotomy position and the catheters were removed under sterile conditions. Patients with unremarkable follow-up after the removal of the catheter were discharged after one day.

Results: A total of 22 women with an age range of 26-42 years (range: 36.4 ± 5.9), presented with intraabdominal bleeding, were included in this study. Six (27.2%) of the patients had undergone subtotal hysterectomy due to uterine atony at another center and were referred to our center due to suspected intraabdominal hemorrhage. The remaining 16 (72.8%) patients had been on oral anticoagulant treatment and had intraabdominal bleeding due to hemorrhagic cyst rupture.

The body mass index of the patients was between $24-36 \text{ kg/m}^2$ (range: 29.2 ± 3.1). Hb values prior to the procedure and after were mean 5.1 ± 0.9 units (range: 4-7) of erythrocyte suspension transfusion and the procedure was $7.1 \pm 0.5 \text{ g/dL}$ (range: 6.0-8.2) and $10.8 \pm 0.4 \text{ g/dL}$ (range: 9.8-11.5) respectively. The amount of blood drained through the Foley catheter from the Douglas between 650 mL and 1800 mL (range: 1000 ± 307). No complications, including intestinal injury, urinary infection and pelvic infection developed following the procedure in any patient other than a fever higher than 38°C in four (18%) patients (Table 1).

Conclusion: The placement of a Foley catheter through the transvaginal route, which is far-removed from the risks of general anesthesia and major surgical procedures in patients with the diagnosis of intraabdominal hemorrhage, may be a good alternative treatment to surgery and a preferred method for follow-up of such patients.

Keywords: Intraabdominal hemorrhage, Foley catheter, oral anticoagulant, peripartum hysterectomy

Table 1. Characteristics of the patients and clinical results

	Patients (n=22)
Age (year)	36.4 ± 5.9 (26-46)
BMI (kg/m^2)	29.2 ± 3.1 (24-36)
Prior abdominal surgery	8 (36%)
Pre-procedure Hb value (g/dL)	7.1 ± 0.5 (6.0-8.2)
Post-procedure Hb value (g/dL)	10.8 ± 0.4 (9.8-11.5)
INR	2.4 ± 0.6 (1.09-3.25)
Amount of blood drained (ml)	1000 ± 307 (650-1800)
Amount of blood transfusion (units)	5.1 ± 0.9 (4-7)
Duration of hospitalization (day)	6.4 ± 0.8 (5-8)
Post-procedure fever	4 (18%)
Intestinal injury	0
Pelvic infection	0
Urinary infection	0
Data is expressed as mean \pm standard deviation or percentage (%).	
BMI: body mass index; Hb: hemoglobine; INR: international normalized ratio	

[PP-110]

Prenatal diagnosis and early endovascular management of Vein of Galen aneurysmal malformation: A case report

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A prenatally diagnosed Vein of Galen aneurysmal malformation (VGAM) patient was referred to our hospital at 37 weeks of gestation. Antenatal ultrasonography demonstrated cardiomegaly, tricuspid insufficiency, polyhydramnios. Neurosonogram revealed a midline cystic lesion. On color doppler examination, the cystic lesion had dilated and there were tortuous vascular structures which had high velocity arteriovenous shunt flow pattern. We confirmed the diagnosis with fetal MR that showed the aneurysm. The rest of the brain parenchyma and ventricles were normal.

A 3,455 g male baby was delivered by elective cesarean section at 38 weeks of gestation. Apgar scores were 7/8 at 1 and 5 minutes, respectively at 3 days of age physical examination was remarkable for tachypnea, 3/6 systolic murmur and oliguria. Due to the neonate had signs of cardiac decompensation with pulmoner hypertension, transarterial embolization was performed at 5 days of age. Liquid adhesive agent was placed into several feeding arteries by an arterial approach, resulting in a marked decrease of flow through the malformation. However, the patient had a left interhemispheric bleeding, twice generalize seizures, signs of cardiac failure after the embolization. He required ventilatory support. Cardiac failure was treated with digoxin, dobutamine, and furosemide. Hydrocephalus did not develop. He was discharged at 35 days of age. Presently, the patient is 7 months of age and has no neurological abnormality at follow-up.

VGAM, a rare congenital abnormality representing <1% of all cerebral vascular malformations, can cause severe morbidity and mortality in the early neonatal period and also later during childhood. Fetal symptoms could be nonimmune hydrops, and intracranial hemorrhage and hydrocephalus. The clinical manifestation consists generally of high-output cardiac failure in the neonatal period. The low systemic resistance of the fetus in utero can decrease the flow through the malformation and minimize cardiac decompensation, but the sudden increase in systemic vascular resistance encountered at the time of delivery will result in a much greater diversion of flow through the malformation. The presence of fetal cardiac failure and injury of the cerebral parenchyma are associated with a poor postnatal fetal outcome and serve as a prognostic marker. These patients may not respond the therapy.

The principal approaches to treatment in the newborn involve attempts to eliminate the high flow through the vascular lesions, either by arterial embolization, usually with a liquid adhesive agent or microcoils, or by venous embolization, with placement of metal coils.

Prenatal diagnosis and early intervention by transarterial embolization produced a good outcome in our case. Prenatal diagnosis provides the opportunity to plan the delivery of the baby at a center where immediate and definitive care can be provided.

Consequently, our improved capabilities for antenatal diagnosis, neonatal critical care, and endovascular therapy have significantly improved the dismal outcome of patients with VGAM. It is crucial to ensure that the embolization is conducted before irreversible brain damage occurs and that it is performed in patients with no major comorbidities.



Figure 1. Gray-scale ultrasound image

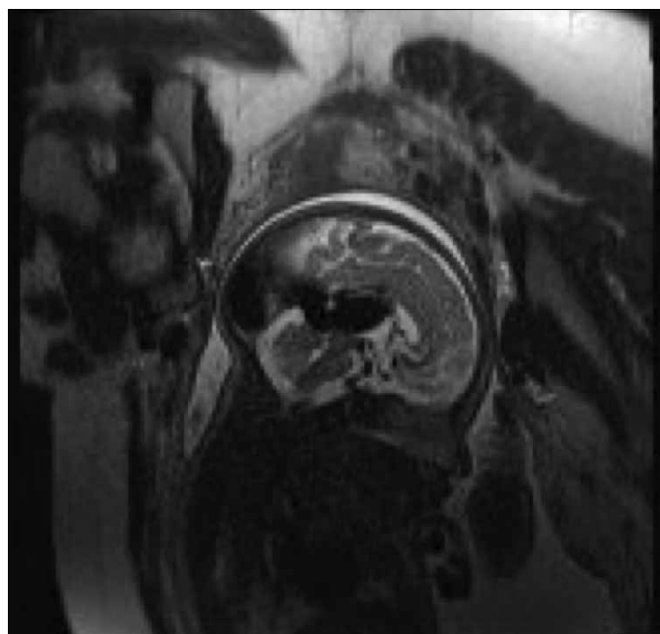


Figure 2. T2-weighted Fetal Magnetic Resonance Image

Keywords: Embolization, prenatal diagnosis, vein of Galen aneurysm malformation

[PP-111]

Prediction of preterm birth with progressive cervical measurements and first trimester PAPP-A levels

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Objective: Early prediction and taking necessary precautions are important to decrease morbidity and mortality in Preterm births (1). We aimed to assess the role of cervical shortening and decreased cervical volume in the prediction of preterm delivery.

Material and Methods: This prospective case control study included women with singleton pregnancy. With use of data from a previous study (1), we estimated that approximately 9 preterm and 52 term pregnancies were needed to achieve at least 80% power to detect effect of sizes at least as large as 0.91 with use of a one-sided $\alpha=0.05$ t test to compare mean lengths. A cross-sectional study including 66 singleton pregnancy (14 ended as preterm and 52 ended as term delivery) was conducted between March 2014 and March 2015. Cervical measurements were obtained beginning from 11 to 12 weeks and they were followed throughout their pregnancy. A standardized questionnaire was formed to gather information about the sociodemographic features. Physical activity of the participants was assessed according to modified Grimby scale in five categories [13]. Category 1 and 2 are classified as sedentary women, category 3 or higher are classified as active women. PAP-A and BHCG MoM levels of combined screening test were also recorded.

Cervical thickness and volume were measured, and the shape was noted by transvaginal sonographic exam at four different gestational periods throughout the pregnancy. Measurements were obtained at 11 to 12 weeks, 15 to 16 weeks, 19-20 weeks and 24-25 weeks.

Presence of regular uterine contractions combined with effacement of the cervix and dilatation of 2 cm or more and/or spontaneous rupture of the membranes before 37 weeks of pregnancy was diagnosed as preterm labor, and treatment was given to these patients for the risk of preterm delivery. Gestational week at delivery was noted, and the role cervical changes in prediction of preterm delivery were evaluated.

Results: Eighty two women with singleton pregnancy were recruited for the study, but 16 patients disqualified from the study because of not attending regularly to the follow-ups. Fourteen cases ended by preterm, and 52 cases by the term delivery. Sociodemographic variables for the groups were shown on Table 1. No difference was detected between term and preterm delivered groups for cervical length and shape. On the other hand, cervical volume at 11-12 weeks was detected smaller in the preterm delivery group ($22584 \pm 13847 \text{ mm}^3$ vs. $28497 \pm 10764 \text{ mm}^3$) ($p=0.02$) (Table 2). Furthermore, PAP-A levels were detected lower in preterm delivery group (0.71 ± 0.27 MoM vs. 1.20 ± 0.54 MoM respectively).

Progressive change in cervical thickness and volume with increasing gestational age was investigated with general linear model for the repeated measures, but no difference was detected between groups.

Table 1. Characteristics of the patients and clinical results

	Preterm group, n=14 (mean \pm SD or %)	Term group, n=14 (mean \pm SD or %)	p
11-12. weeks			
Cervical length (mm)	48.5 \pm 10.5	52.8 \pm 10.6	NS
Cervikal volume (mm ³)	22504 \pm 13837	28497 \pm 10763	0.020*
15-16. weeks			
Cervical length (mm)	45.5 \pm 10.5	45.5 \pm 10.5	NS
Cervikal volume (mm ³)	21139 \pm 13517	21139 \pm 13517	
19-20. weeks			
Cervical length (mm)	48.7 \pm 11.2	47.3 \pm 8.9	
Cervikal volume (mm ³)	22714.3 \pm 7810	21343 \pm 9723	NS
23-24. weeks			
Cervical length (mm)	47.6 \pm 11.0	48.1 \pm 10.5	
Cervikal volume (mm ³)	23983 \pm 12227	24390 \pm 13430	NS
PAPP-A	0.719 \pm 0.266	1.203 \pm 0.544	0.008*
*Statistically significant. PAPP-A: pregnancy associated protein A; NS: statistically non significant			

Conclusion: Cervical length measurements at specific weeks between 11 to 24 weeks or progressive change in serial measurements have no predictive effect for preterm delivery. On the other hand, cervical volume measurement and the PAPP-A levels at 12 weeks seems promising, but further studies with larger sample size are required to clarify the subject.

Keywords: Cervical length, cervical volume, preterm delivery, PAPP-A

[PP-112]

Hysteroscopic treatment of the cesarean-induced isthmocele

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Introduction: Cesarean scar syndrome results from a postoperative defect of the uterine isthmus, also known as an isthmocele. Patients present with gynecological symptoms, such as abnormal genital bleeding or infertility, after cesarean delivery. Although the cesarean rate is increasing worldwide, this syndrome is not widely known. Hysteroscopy is commonly considered the gold standard for the diagnosis and also for the treatment, at least in the case of defects of small size. The case presented with abnormal uterine bleeding was treated by hysteroscopic approach.

Case: A 26-year-old woman, gravida 2 para 2, was referred to our clinic for uterine scar evaluation. She had a cesarean, at term 1 years earlier. For 1 years the patient has suffered from abnormal uterine bleeding. Ultrasound examination and Magnetic Resonance Imaging (Picture 1) were done and appearance was observed consistent with isthmocele. Hysteroscopic resection was done. There was no post-



Figure 1. Sagittal T2-weighted fat suppressed magnetic resonance imaging

operative complication and the patient was discharged at same day. After six weeks at control recovery was remarkable.

Discussion: In recent years, the incidence of caesarean sections is dramatically on the increase in developed countries, and consequently, the condition named isthmocele, also defined as cesarean scar defect, diverticulum, pouch, and niche, has attracted attention. The most reported symptoms about isthmocele are postmenstrual spotting and infertility. The rate of isthmocele in women with one previous cesarean section is 14 %; with two previous cesarean section is 23%; with three previous cesarean sections is 45%. The main risk factors are uterine incision closure techniques, suture materials, transverse lower uterine incision and wound healing. Many surgical techniques have been proposed to correct isthmocele: combined laparoscopic-vaginal as well as purely vaginal approaches; laparoscopic excision of the fibrotic tissue from the edges of the cesarean scar; hysteroscopic resection of the fibrotic tissue. Short-term and long-term outcomes associated with hysteroscopic correction would indicate that this method may be the first choice because it is minimally invasive and provides good therapeutic results.

Keywords: Abnormal uterine bleeding, caesarean sections, hysteroscopy, isthmocele

[PP-113]

Efficacy of bispectral index monitoring for prevention of anaesthetic awareness and complications during oocyte pick-up procedure

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Objective: The oocyte pick-up (OPU) procedure, defined as collection of oocytes after over stimulation, is an important stage of in-vitro fertilization (IVF) treatment. The study was planned by considering that the use of bispectral index monitoring ensures sufficient depth of anaesthesia, and will prevent aesthetic awareness and patient movement.

Material and Methods: Ninety-eight patients undergoing OPU in American Society of Anesthesiologists (ASA) group I-II, above the age of 18 were randomly divided into 2 groups as control group (n=48) and BIS group (n=50). After propofol and remifentanyl induction, Group K were given additional propofol according to reaction response, while Group B were given propofol at BIS values of 60 and above with the aim that BIS values be 40-60. Preoperatively, after anaesthesia induction, at the 5th and 15th minutes and at the end of the procedure, non-invasive blood pressure, heart rate, oxygen saturation were recorded with BIS values also recorded in the BIS group. Total procedure time, recovery time, intraoperative patient movement, additional propofol consumption and total number of oocytes were recorded. Nausea-vomiting, side effects and awareness during anaesthesia were noted.

Results: Demographic data (age, weight, height, total procedure duration, recovery duration, mean oocyte number) were similar in the two groups (p>0.05 for all). The recovery duration in the BIS group was significantly low compared to the control group (p<0.001) (5 min (7-3), 6 min (8-4) respectively) while the median value of additional propofol consumption was found to be significantly low (p<0.001) (20 (60-0) mg, 40 (100-0) mg, respectively) (Table 1). In the control group intraoperative movement was observed in 9 patients, while this was observed in 2 patients in the BIS group. Baseline BIS values were between 95-98, while after induction the values significantly fell compared to all other times (p<0.001) (Table 2). No patient had anaesthetic awareness.

Conclusion: During OPU procedure BIS monitoring is considered to prevent anaesthetic awareness, intraoperative movement and com-

Table 1. Demographic characteristics (age, height, weight, total procedure duration, number of oocytes, recovery duration) and additional propofol consumption

	Control (n=48)	BIS (n=50)	p
Age	34.00±5.73	34.80±5.38	0.478
Weight	69.63±8.59	69.84±7.54	0.895
Height	160 (172-155)	160 (170-155)	0.780
Total procedure duration (min)	16 (20-12)	16 (21-12)	0.568
Additional propofol consumption (mg)	40 (100-0)	20 (60-0)	<0.001
Recovery duration (min)	6 (8-4)	5 (7-3)	<0.001
Oocyte number	8 (26-1)	6 (31-0)	0.598
Data is expressed as mean ± standard deviation or percentage (%).			
BMI: body mass index; Hb: hemoglobin; INR: international normalized ratio			

Table 2. Bispectral index scores of patients according to time

BIS Score (n=50)	Median (Maximum-Minimum)	p
Preoperative=I	98 (98-95) I→II	<0.001
	I→III	<0.001
After Induction=II	41 (54-30) I→IV	<0.001
	I→V	0.002
Intraop 5 th min=III	46 (58-38) II→III	>0.05
	II→IV	<0.001
Intraop 15 th min=IV	50.5 (58-42) II→V	<0.001
	III→IV	<0.001
End of procedure=V	81 (87-76) III→V	<0.001
	IV→V	<0.001

Data is expressed as mean ± standard deviation or percentage (%).
BMI: body mass index; Hb: hemoglobine; INR: international normalized ratio

plications caused by insufficient anaesthetic use as it ensures optimal doses of anaesthetic agents are used and early recovery.

Keywords: Anaesthetic awareness, bispectral index, intraoperative patient movement, oocyte pick-up

[PP-114]

Fetal enteric duplication cyst: A case report

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Introduction: Abdominal cysts diagnosed antenatally represent both normal variants and pathological entities. The most common imaging modality used for antenatal scanning is ultrasound (1). Here we present a case of an enteric duplication cyst detected on antenatal period by ultrasound exam.

Case: A 29 year old, multiparous pregnant woman presented to our antenatal outpatient clinic at 32 week gestation. First and second trimester screening tests showed no increased risk of trisomy 21. The patient had gestational diabetes mellitus diagnosed at 24th week with oral glucose tolerance test (75 gr). Normal fasting and postprandial glucose levels were achieved during the pregnancy.

During routine 3rd trimester ultrasound, a hypoechogenic, non-septated intraabdominal cyst sized 4.5 centimeters was detected (Figure 1). There were no other major anomalies. A control ultrasound was performed a week later and there were no change in the nature or size of the cystic lesion. Elective cesarean section was performed on 38th gestational week and a vital girl weight 3360 gr was born. Neonatologist was warned about the prenatal diagnosis of an intraabdominal cyst. Our patient had an uneventful postoperative period and discharged after 2 days. The neonate was admitted to pediatric surgery clinic, an abdominal ultrasound was performed which showed normal configuration of hepatobiliary system and kidneys. However there was a cystic lesion on the right lower quadrant sized 2 centime-



Figure 1. Fetal enteric duplication cyst

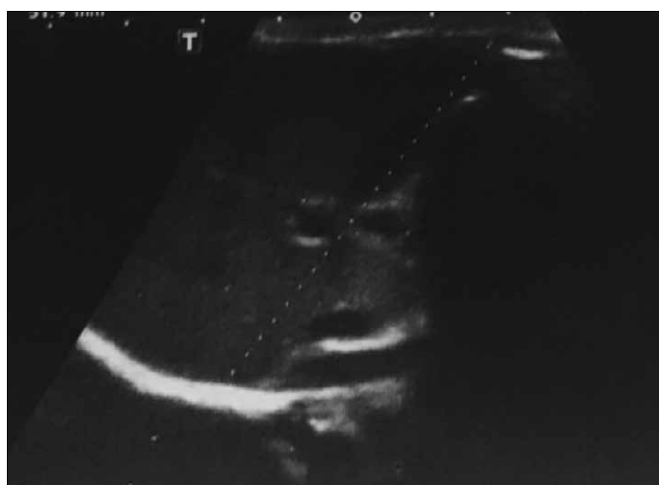


Figure 2. Neonatal abdominal ultrasound

ters (Figure 2), which is anechoic and had a similar structure to the intestinal wall. The lesion was thought to be an enteric duplication cyst. The neonate did not have any gastrointestinal symptoms and discharged after a week. Control ultrasound was performed a month later, which showed the same cystic lesion. Infant still has no symptoms, thus surgery was not considered. Follow up is planned.

Conclusion: Duplication cysts are benign, rare anomalies that arise during embryonic development. They are most frequently found in the proximal small intestine, although they can also be found in the esophagus, stomach, and colon. Cysts are typically discovered incidentally by imaging since they uncommonly cause symptoms. Complications are rare but may include dysphagia, abdominal pain and bleeding. The majority are likely to remain asymptomatic for several months, after which a resection can be planned. A surgical approach was taken for

infants who became symptomatic or were at high risk of complications due to the nature of the cyst. Similarly, if any cysts continued to enlarge or became complicated with rupture/bleeding, surgical management was again advocated. For all remaining asymptomatic cysts, routine follow-up was arranged until resolution of the cyst.

Intraabdominal enteric duplication cysts are increasingly likely to be detected antenatally. An accurate diagnosis is essential for arranging the antenatal and postnatal care that may be required in immediate newborn period (2).

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Keywords: Enteric cyst, fetal, small intestine

[PP-117]

Personalized embryo transfer pET after Endometrial Receptivity Array (ERA) in patients with repeated implantation failure – personal experience

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Objective: Recurrent implantation failure can be related to the state of the endometrium. An endometrial receptivity array (ERA) is developed to identify a personalized window of implantation by determining the receptivity of the endometrium at specific days during a women's cycle.

The aim of this observational study was to evaluate the feasibility of the test to better define the window of endometrial receptivity in patients with recurrent implantation failure.

Material and Methods: Since November 2013, ERA test was offered to forty-five candidate patients with >3 previous IVF failures to assess the state of their endometrial receptivity as well as their personal window of implantation. This analysis contains only the patients, who have been consulted and treated by one physician (*) in two centers. According to the manufacturer's recommendations, an endometrial tissue sampling has been taken during natural cycle (7 days after Luteinizing Hormone (LH) surge) or 5 days after progesterone (P) replacement commenced during estrogen-primed hormone replacement therapy (HRT) cycles.

Endometrial tissue sampling was performed by a sharp curette or by pipelle under intravenous sedation. The sample was placed in a dedicated cryotube containing tissue preservation solution. The tube was refrigerated for at least 4 hours before sending it to the manufacturer's laboratory for the microarray and bioinformatics analysis. Extracted RNA with of certain quality was used to run on the microarray. The

microarray quantifies the expression of 238 genes involved in endometrial receptivity. An informatics predictor analyzes gene expression and classifies the endometrium as 'Receptive' or 'Non Receptive' with a sensitivity of 0.997 and specificity of 0.885.

Results: High quality RNA material has been obtained in 43 of 45 patients (96%). There were no intra or post-operative complications. We have found a non-receptive (pre-receptive or post-receptive) endometrium at the day of endometrial biopsy in 37% of the patients (28% and 9%, respectively). The number of cases, rates and clinical impact of the test on repeated implantation failure (RIF) patients will be updated for presentation. Following ERA results, we have achieved 21 pregnancies after 34 embryo transfer (62%), so far. We achieved 6 singleton pregnancies after 8 pET (75%).

Conclusion: ERA test underlines the fact that patients with repeated implantation failures have often problems on the endometrial site. pET seems to improve the success rates. More comprehensive use of ERA may allow the individualisation of the day of frozen embryo transfer.

Keywords: Personalized embryo transfer, in vitro fertilisation, endometrial receptivity

[PP-118]

Drainage of subchorionic hematoma may mimic membrane rupture in early pregnancy

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Objective: Sudden gush of clear fluid from the vagina is a typical complaint of a pregnant patient with membrane rupture although it may also be due to leakage of urine or increased vaginal discharge. Here, we represent 2 cases with sudden fluid efflux from the vagina which is caused by drainage of a subchorionic hematoma (SCH).

Case 1: A 28-year old woman was being followed up at our antenatal clinics at her 5th pregnancy. She declined antenatal screening tests for aneuploidy. Course of the pregnancy was uneventful until 14th gestational week at which she presented with a complaint of vaginal spotting and pelvic pain. Ultrasonographic examination revealed a healthy fetus with a big crescentic shaped SCH covering whole anterior surface of the chorion (Figure 1). At vaginal examination, cervix was closed but there was some clear to pink vaginal discharge. Uterus was tense on palpation. We decided to hospitalize her for follow up. After an hour she had a sudden gush of clear to pink fluid that wetted her bed and her clothes up to her knees. Occurrence of this sudden discharge in high quantity, appearance and odor of the fluid were similar to amniotic fluid. Then uterus got softer, ultrasound examination showed that the SCH had disappeared and amniotic fluid volume was normal. The Amnisure test (placental alpha-microglobulin-1) was also found to be positive. During the following days SCH reappeared and discharged several times. So, the fluid gush was thought to be drainage of a SCH and amnisure test result was thought to be false positive. After a week her vaginal pads became completely dry but SCH persisted up to 26th week which got progressively smaller and disappeared thereafter. Rest of the pregnancy was uneventful and she delivered a healthy male infant of 4060 grams at 38/7 weeks

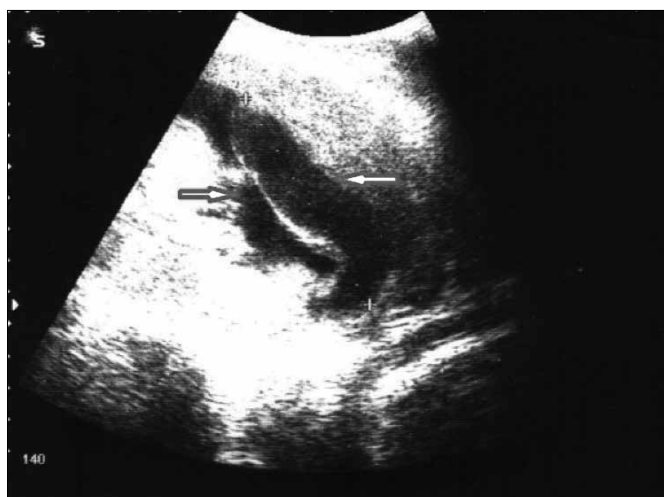


Figure 1. A crescentic shaped subchorionic hematoma

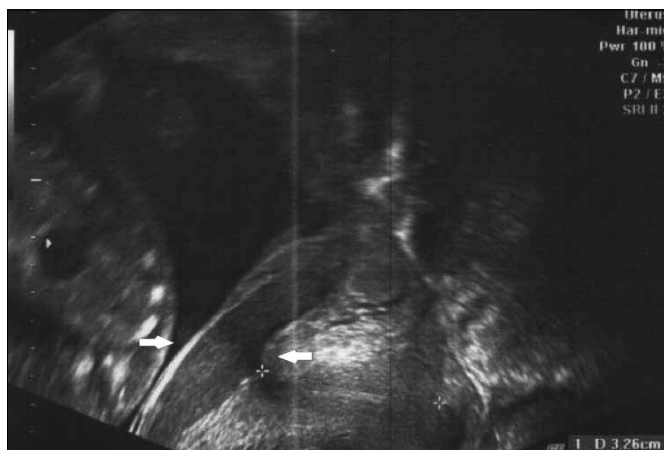


Figure 2. A subchorionic hematoma located above the internal cervical os

of pregnancy.

Case 2: A 21-year old primigravid woman admitted at her 20²/5 weeks of pregnancy a few hours after a sudden gush of fluid from the vagina thinking that she had membrane rupture. She also had mild pelvic pain. She mentioned that she had similar fluid discharge for the last 2-3 weeks, but this time it was heavier. Her antenatal follow up was uneventful except a SCH detected at ultrasound a few weeks ago. Speculum examination showed no fluid pooling in the vagina. Amniure test was negative. Ultrasound examination revealed a healthy fetus and a normal amount of amniotic fluid. But there was an area of SCH located above the internal cervical os (Figure 2). The fluid discharge that the patient had was thought to be due to emptying of the SCH. The patient was advised to have pelvic rest and had normal amount of amniotic fluid and no complaints except minimal spotting after 4 weeks.

Conclusion: Sudden gush of fluid from the vagina during early pregnancy may be due to emptying of a SCH collection. This fluid may have a yellow to pinkish color as well as red color. Amniure test may be false positive. SCH drainage may clinically mimic amniotic membrane rupture.

Keywords: Amniotic fluid, membrane rupture, subchorionic hematoma

[PP-119]

Non surgical management of alive ectopic pregnancy with high B-HCG titres by ultrasound-guided potassium chloride injection and systemic methotrexate: 2 Cases

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Background: Methotrexate (Mtx) is accepted regimen for conservative treatment of unruptured ectopic pregnancy. However, large gestational sac size, existence of cardiac activity and high titres of serum beta human chorionic gonadotrophin (B-HCG) are relative contraindications of Mtx treatment. These patients have low success rates.

Case reports: We want to report a successful management of 2 alive ectopic pregnancy with high B-HCG titres. First case 29 years old, gravida 3, parity 1. She applied to seconder amenorrhoea with 45.331 B-HCG value. Transvaginal ultrasonography revealed an empty uterine cavity with an ectopic gestational sac (measuring 20 mmX20 mm) in left adnexa with 7 week, alive fetus. We implement using ultrasound-guided intrasac potassium chloride (KCl) injection and single dose systemic Mtx. Successful resolution of ectopic pregnancy with negative serum B-HCG (<5 mIU/mL) was achieved four weeks later. Second case is 34 year-old infertile woman. She presented with amenorrhoea with 19.513 B-HCG titres. We diagnosed an ectopic gestational sac (25 mmX25 mm) in left adnexa with alive fetus. We applied ultrasound guided intrasac injection of KCl and single dose systemic MTX. Successful resolution of ectopic pregnancy with negative serum B-HCG (<5 mIU/mL) was achieved five weeks later. Surgical treatment was required in these two cases, but the patients did not accept the operation. Since the patient refused operative intervention, we decided to apply intrasac KCl instillation prior to giving systemic MTX. The risks and benefits were discussed with the patient and written consent form were taken.

Conclusion: Concurrent use of intrasac KCL with MTX could potentially improve outcome in alive ectopic pregnancies with high serum B-HCG titres. Unruptured alive ectopic pregnancies of many types can be successfully managed with local injection of KCl or MTX without surgical intervention.

Keywords: Alive ectopic pregnancy, Intrasac KCl, Systemic MTX, Serum B- HCG

[PP-120]

Rates of deliveries with vacuum extraction and the relationship between maternal age, parity and neonatal apgar scores

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Objective: The aim of this study is to investigate the rate of vacuum extraction utility and the impact of parity and intrauterine fetal condition on vacuum extraction.

Material and Methods: This study was conducted in Diyarbakır Obstetrics and Pediatrics Hospital in Turkey during 2012 by the 20050 newborns who were delivered at the obstetrics/gynecology clinics. Two hundred and forty nine of them were vacuum deliveries. Parity, maternal age, gestational duration, birth weight and APGAR(Activity, Pulse, Grimace, Appearance, Respiration) scores were recorded for each delivery.

Results: Vacuum extraction was conducted in 249 cases (1.24 %). The features and outcomes of the 249 vacuum assisted deliveries were as follows. Average maternal age was 23.56 ± 4.27 years, average gestational age was 38.73 ± 1.56 weeks and average parity was 1.95 ± 1.57 . The average APGAR scores of the newborns were 7.43 ± 1.33 by the first minute and 9.24 ± 1.29 by the fifth minute.

Parity and neonatal birth weights were positively correlated with gestational duration. APGAR scores observed by the first and fifth minutes were negatively correlated with parity. There was no correlation between neonatal birth weights and APGAR scores at any time.

Parity was the only effective parameter on the APGAR scores by both the first and fifth minutes.

Conclusion: According to the results of this study, vacuum extraction delivery rates are lower than most of the developed countries. Cesarean rates are higher than the suggested cesarean rates (15%) by World Health Organisation (WHO). Parity is the major factor that effect the APGAR scores of the neonates. Vacuum extraction may be suggested more often especially for the deliveries of low parity women to decrease the cesarean section rates.

Keywords: Vacuum assisted delivery, cesarean section, APGAR score, neonatal outcome

[PP-121]

The relationship between obesity and primary dysmenorrhea: Does increase in body mass index effect dysmenorrhea?

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Objective: In the present study, it was aimed to evaluate the relationship between obesity and dysmenorrhea and the effects of sociodemographic features on dysmenorrhea.

Material and Methods: A total of 303 women were included in the study. Grading of severity of dysmenorrhea was made based on Verbal Multidimensional Scoring System.

Results: When correlations between severity of dysmenorrheic symptoms and patients' significant correlation was detected between severity of symptoms and family history ($p=0.008$). BMI values in the normomenorrheic individuals were significantly higher than BMIs of the slightly and moderately dysmenorrheic group ($p<0.05$). BMI of the severely dysmenorrheic group was significantly higher than that of the mildly dysmenorrheic group ($p<0.05$).

Conclusion: The main underlying cause of dysmenorrhea may not be obesity, but it may be one of the correctible predisposing factors. Balanced diet and trying to bring down one's BMI within normal limits may lower the incidence of dysmenorrhea.

Keywords: Dysmenorrhea, obesity, body mass index

[PP-122]

Isolated fallopian tube torsion after tubal occlusion for hydrosalpinx in infertile patient

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Objective: Isolated tubal torsion is a very rare cause of gynecological acute abdominal pain. Its incidence is about 1/1500000 and usually seen at 20-40 years age. Intrinsic (congenital anomalies, long mesosalpinx, hydrosalpinx, hematosalpinx, tubal spasm, tubal neoplasm, primary tubal surgery) and extrinsic (ovarian and paratubal masses, abnormal intestinal peristalsis, pregnancy, trauma, adhesion, pelvic congestion and sudden movements of body) factors can be responsible. It is diagnosed on right tuba is three times more common. This is due to the sigmoid colon on the left side and lower mobilization capacity of left tuba. The most common differential diagnosis are acute appendicitis and ovarian torsion. There is no specific symptom or laboratory finding for the disease; so the diagnosis is commonly confirmed intraoperatively. In this case we reported a fallopian tube torsion following right tubal occlusion for hydrosalpinx in infertile women.

Case: Twenty four years old, primer infertile women (for five years) was applied to our emergency service due to right abdominal pain that was started one day ago and accelerated. Patient had an right tubal occlusion operation one month ago due to right hydrosalpinx. Nausea and vomiting began on follow up. On abdominal examina-

tion; rebound and defence findings were positive. Mild leucocytosis was detected and pregnancy test was negative. Uterus and bilateral adnexes were normal on transvaginal sonograph; no free fluid was present in Douglas. Laparotomy was performed by general surgeon due to the prediagnosis of acute appendicitis. Appendix was normal in laparotomy. Right fallopian tube was double torsioned around and was necrotic and edematous. Right salpingectomy was performed.

Discussion: The presentation of fallopian tube torsion is similar to ovarian torsion. It typically presents with lateralized lower abdominal pain, frequently accompanied by nausea and vomiting. Tubal torsion is often associated with fallopian tube pathology such as hydatic cysts of Morgagni, hydrosalpinx, and pyosalpinx. It commonly occurs on the right side. Ultrasound may help to identify a cystic structure in the pelvis, but differentiation from ovarian torsion is difficult. Diagnosis is made at the time of surgery in most cases and laparoscopy can be used to managed patients with tubal torsion.

Conclusion: Isolated fallopian torsion is a rare entity. If the risk factors are present such as previous tubal surgery, this diagnosis should always be kept in mind for differential diagnosis of acute abdomen.

Keywords: Isolated fallopian tube torsion, tubal occlusion

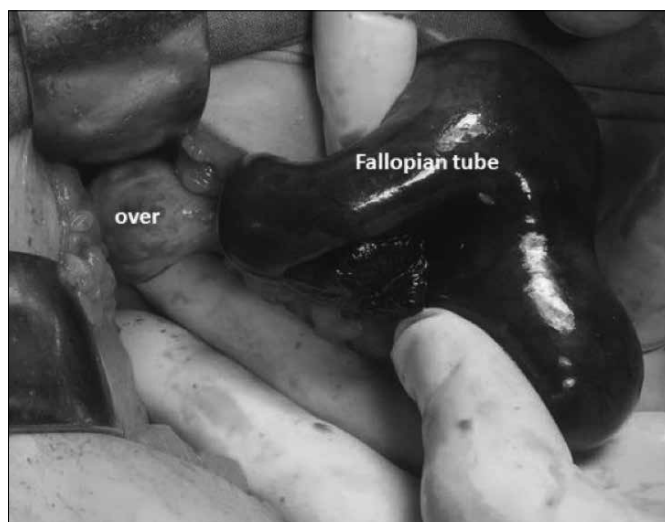


Figure 1. Intraoperative appearing

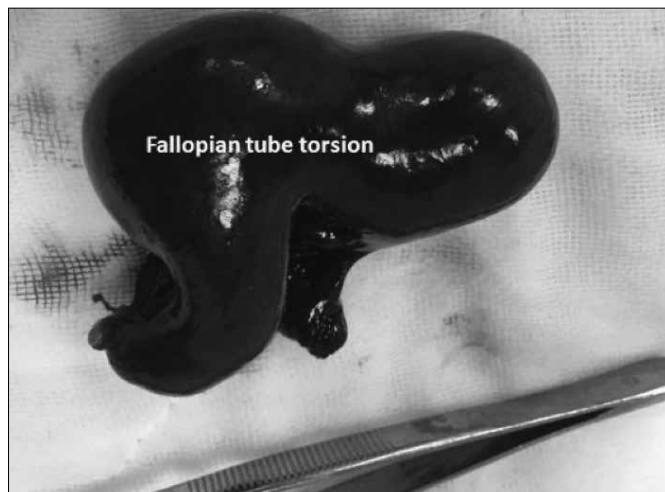


Figure 2. Pathology specimen after excision

[PP-123]

Angiomyxoma of the pelvis

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Introduction: Aggressive angiomyxoma (AA) is an unusual mesenchymal tumor. AA occurs most commonly in women of reproductive age and is located in the perineal or pelvic region and predominantly in pelvis of young females. Its surgical excision is a big challenge and

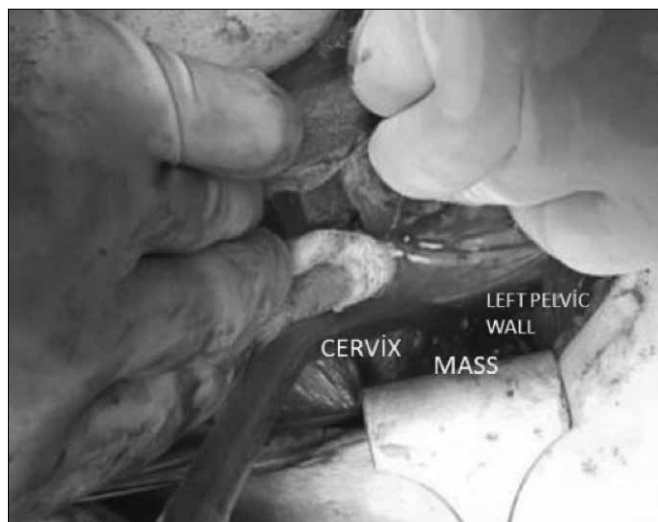


Figure 1. Intraoperative appearing

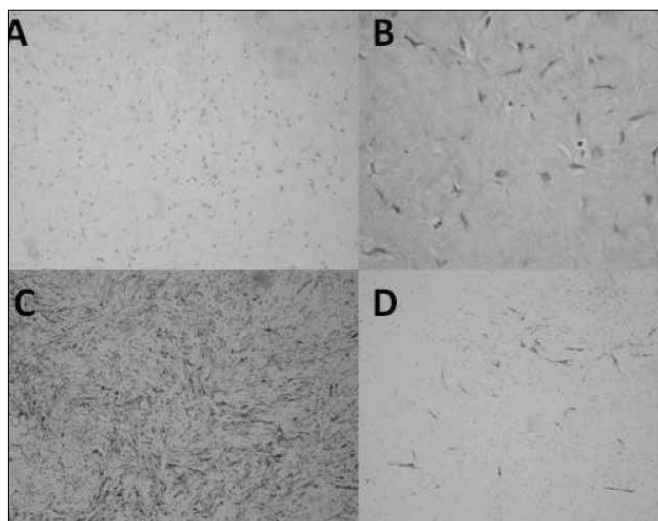


Figure 2. Pathologic evaluation. Higher magnification showing sparse spindle-shaped cells with bland nuclei (a) (HE, ×400), both areas inside the nodule are composed of epithelioid cells with abundant eosinophilic cytoplasm (b). Nuclear enlargement is observed, but mitotic figures are not apparent. Spindle-shaped cells showing positivity for desmin (×400) (c), Spindle-shaped cells showing positivity for actin (×400) (d).

usually leads to recurrence due to incomplete excision. This is a distinct soft tissue tumor that has a prominent myxoid matrix and numerous thin-walled blood vessels and may have an aggressive local recurrence. The tumors have the characteristics of large size and slow growth, and are not painful.

Case: 42-year-old female presented with a 2 week history of dyspareunia. Vaginal examination revealed a mass in the upper left vaginal wall which was extended to the pelvic region. The mass was non-tender and firm in consistency. The inguinal lymph nodes were not enlarged. At first, we supposed the mass to be leiomyoma of broad ligament and performed a pelvic magnetic resonance imaging (MRI). The pelvic MRI revealed findings that a well-defined mass-like lesion of about 5×7 cm was seen on the left parametrium. The mass showed bright signal intensity on T2WI and demonstrated delayed enhancement after contrast administration. Because of the limited exposure and technical challenge of the vaginal approach due to mass location, the patient underwent abdominal surgery with Pfannenstiel incision in gynecologic position. The tumor mass was about 5×7 cm and it was firm and extend into the left parametrium between uterus and bladder (Figure 1). The mass was completely excised via a totally trans abdominal route. Microscopically, the tumor was composed of spindle and stellate-shaped cells embedded in a loose myxoid matrix. These cells showed low to moderated cellularity and had eosinophilic cytoplasm with no significant nuclear pleomorphism and mitosis. Variable-sized thin-walled capillaries and thick-walled vascular channels were haphazardly arranged in the stroma. Some of these vessels showed perivascular hyalinization in the vascular walls (Figure 2). Immunohistochemical staining of the tumor was negative for desmin and actin (Figure 2). Based on these pathologic features, aggressive angiomyxoma was diagnosed. She was continuously followed-up in our hospital for 6 months after resection, with no clinical or radiologic evidence of recurrence.

Discussion: Aggressive angiomyxoma (AA) is a rare, locally aggressive myxoid mesenchymal neoplasm arising in the pelvis and perineal regions. AA was first described in 1983 by Steeper and Rosai. It usually occurs in women, especially middle-aged; 95% of total cases are found in females. AA tends to grow slowly with a low tendency to metastasize.

Conclusion: AA is a rare entity but should always be considered especially for differential diagnosis of pelvic and perineal masses. AA can be optimally treated by surgical excision while avoiding mutilating surgery. When complete resection is possible, it should be sought as it offers the lowest recurrence rate. AA is rarely life threatening and therefore partial resection is acceptable when high operative morbidity is anticipated. Regardless of whether the treatment is surgical, hormonal, or multimodal, it is clear that AA requires close and long-term follow up.

Keywords: Angiomyxoma, pelvic

[PP-124]

Management of tuboovarian abscess and diffuse peritonitis due to streptococcus constellatus infection via laparoscopic abscess drainage and easily occurrence of serosal injury of bowel

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Introduction: Tuboovarian abscess (TOA) is one of the late complications of pelvic inflammatory disease. Fallopian tube, ovary and adjacent organs are involved with the disease and it can be life-threatening if the abscess ruptures. These abscesses are seen most commonly in reproductive age women and result from upper genital tract infection. This abscess formation is related with polymicrobial infection but the most commonly isolated organisms from tuboovarian abscesses are *Escherichia coli* and *Bacteroides* species (1).

Case report: A 41-year-old woman, gravida 3, para 3, presented to the emergency department of the Sisli Hamidiye Etfal Training and Research Hospital complaining of severe abdominal pain. Abdominal palpation revealed tenderness and rebound. There was adnexal tenderness during vaginal examination and transvaginal ultrasonography

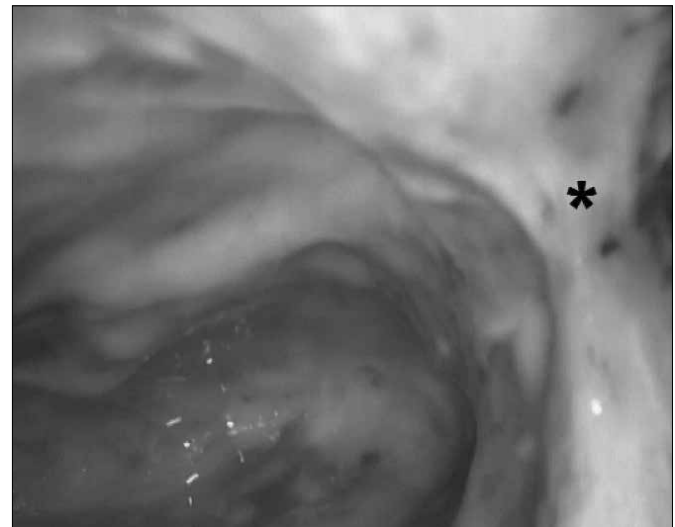


Figure 1. Laparoscopic image showing diffuse fibrinopurulent peritonitis and adhesion (asterisk) between bowel and abdominal wall

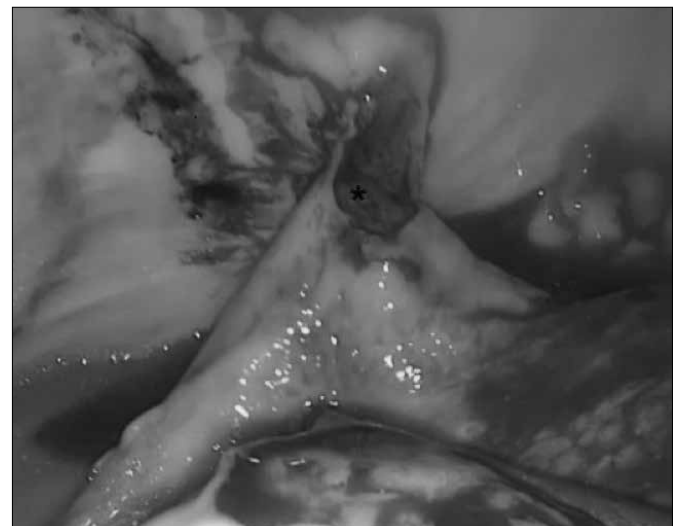


Figure 2. Bowel injury during blunt dissection

showed heterogeneous complex left tubo-ovarian mass lesion on left side. Fever and pain persisted on fourth day of antimicrobial therapy and the decision to perform the surgery was made. Open laparoscopic entry was preferred to avoid bowel injury due to adhesions. After replacement of telescope, a remarkable amount of fibrinopurulent exudate involving the entire abdomen was easily visible (Figure 1). There were severe adhesions between bowel and anterior abdominal wall. We observed a serosal defect on colon serosa during the dissection however there was not a mucosal defect (Figure 2). Piyosalpinx was drained on the left side. Postoperative course was uneventful. Nasogastric tube was remained for postoperative 24 hours and oral feeding was allowed for clear liquid diet after removal of nasogastric tube. Soft diet was given on postoperative day 4. Streptococcus constellatus subspecies constellatus was isolated from the peritoneal fluid however piperacillin/tazobactam regimen was not changed due to sensitivity of isolated microorganism. Antibiotic therapy was continued for 14 days. The patient was discharged postoperative day 14.

Conclusion: N. gonorrhoeae and C. trachomatis, are responsible pathogens in many cases for PID; however, microorganisms that comprise the vaginal flora (e.g., anaerobes, G. vaginalis, Haemophilus influenzae, enteric Gram-negative rods, and Streptococcus agalactiae) also have been associated with PID (2). There are several reports related to streptococcus anginosus group in the literature and most of this reports present an abscess formation however tuboovarian abscess and diffuse peritonitis due to streptococcus constellatus is very few in the literature.

Laparoscopic management of tuboovarian abscess is a reliable choice in experienced hands but bowel injury may be inevitable in complicated cases. Separation of bowel from abdominal wall or adjacent organs can lead to a seromuscular tear. Hence, gynecologic surgeons should be prepared for bowel injury and the patients should be informed about the potential complications related to the operation. A surgical procedure for tuboovarian abscess should be performed in a multidisciplinary center including general surgeon, interventional radiologist and infectious disease specialist.

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Keywords: Bowel injury, laparoscopy, streptococcus constellatus, tuboovarian abscess

[PP-127]

Comparison of first trimester and second trimester prenatal screening results in the same pregnancies

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Objective: To detect fetal aneuploidies, prenatal screening tests were developed. These tests and its combinations being performed at first and second trimesters have different detection rates for Down Syndrome. The aim of this trial is to compare first and second trimester screening tests and to examine the difference between their risk scores.

Material and Methods: The files of 1136 cases having first and second screening tests were examined retrospectively. Patient's ages, first and second trimester Trisomy 21 and Trisomy 13-18 risk scores were registered with their gestational weeks, first trimester CRL and NT values. Collected data were analysed with SPSS (Statistical Package for Social Sciences).

Results: Mean age of the cases were detected as 26.6±5.8. 0.7% (n: 8) of first trimester tests and 6.8% (77) of second trimester tests were reported as having high risk for trisomy 21. The case numbers in the groups of that the difference between first and second trimester trisomy 21 risk scores were same, negative and positive, were 55 (54.8), 468 (41.2) and 613 (54.4%), respectively. While 11% (n: 125) of those showing positive or negative difference were above 35 years old, this rate was just 0.1% (n: 1) in those having no difference.

Discussion and Conclusion: Screening tests have an important position at the present time. Prenatal screening tests are advised to the young women for the purpose of declining the number of invasive tests. There are trials confirming that the first trimester test are stronger than the second trimester test over detecting Down syndrome. In our study, that, 76 of 1128 patients detected as having low risk (<1/250) for trisomy 21 at the first trimester were encountered as having high risk (>1/250) at the second trimester test, revealed the reliability of first trimester screening test. The risk of trisomy 21 decreased in 54.4% and 41.2% of cases in favour of first trimester and second trimester screening tests, respectively. Our trial is supporting medical literature. Interpreting the tests independently will cause false positive results. Because of this we think that it is necessary to evaluate first and second trimester test results as integrated.

Keywords: First trimester screening, second trimester screening, prenatal screening

[PP-128]

Myomectomy during cesarean section: A case report

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Introduction: Uterine fibroids are most common pelvic tumor in reproductive age (1). The incidence of fibroids during pregnancy has been found to range from 0.05-5%. (2). Most of the fibroids are asymptomatic during pregnancy however risk of cesarean delivery, malpresentation, labor dystocia, postpartum hemorrhage, peripartum hysterectomy



Figure 2. Leiomyoma in the lower uterine segment



Figure 1. Ultrasound image of leiomyoma

tomy, retained placenta, preterm labor, placenta previa, first-trimester bleeding, abruption are increased during pregnancy (3).

Case presentation: A 36-year-old, gravida 1 para 0 woman was referred to our perinatology clinic at 36 weeks of gestation due to uterine fibroid. Pregnancy follow-up was carried out by a private hospital. Patient was asymptomatic and an ultrasound examination revealed a uterine fibroid measuring 10x9x8 cm in size (Figure 1). Fibroid was located on anterior lower uterine segment just near the Kerr Incision line. Cesarean delivery and myomectomy were scheduled at 39 weeks of gestation due to oblique presentation of fetus. Pfannenstiel Incision was used and uterine Incision was made lateral to the uterine fibroid (Figure 2). Myomectomy was performed following delivery of the fetus. Myometrial defect was closed in two layers with no. 1 polyglactin 910 suture. Uterine Kerr Incision was closed with continuously locked suturing and a hemovac drain was placed anterior to the uterus. Postoperative course was uneventful.

Conclusion: Severe blood loss and necessity of hysterectomy are major concerns regarding myomectomy during cesarean section however a recent study showed that myomectomy does not cause morbidity, except a slightly increased drop in hemoglobin levels (4). Myomectomy during cesarean section can be safely performed by experienced surgeons.

Keywords: Cesarean section, myomectomy

[PP-130]

Diagnostic value of neutrophile/lymphocyte ratio in ovarian torsion

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Objective: Ovarian torsion is a gynecologic emergency accounting for 2-3% patients presenting to the emergency department with acute abdominal pain. Despite the difficulty in diagnosis, it requires quick, accurate diagnosis and treatment. Clinical presentation of ovarian torsion is nonspecific. Gray scale sonography, Doppler and laboratory analysis are the modalities of choice for helping accuracy of diagnosis, but surgery is still the gold standard diagnostic method. The purpose of this study, determine the availability of haematologic inflammatory markers for preoperative diagnosis of ovarian torsion.

Material and Methods: Medical records of patients which surgically and histopathologically confirmed ovarian torsion were reviewed retrospectively between the years 2005-2015 in our clinic. Preoperative values of neutrophile/lymphocyte ratio (NLR), platelet/lymphocyte ratio (PLR) and plateletcrit (PCT) of 36 patients were calculated, and compared with control group (135 patients). NCSS (Number Cruncher Statistical System) 2007 program was used for statistical analysis. Mann-Whitney U test was used for comparison of quantitative data, and Yates Continuity Correction test was used for comparison of qualitative data. Scanning diagnostic tests and ROC Curve analysis were used to determine the cut-off value. Significance level was accepted as $p < 0.01$.

Results: Statistically significant result was determined only for NRL. In the study group, value of the NRL was between 0.61 and 19.71, and mean value was 6.64. In the control group, value of the NRL was between 0.04 and 10.61, and mean value was 2.37. Statistically, NRL was significantly higher in the study group than the control group ($p = 0.001$). Cut-off value for the NRL was determined as 3.10. In the study group, $NLR \geq 3.10$ was statistically significantly higher than the control group ($p = 0.001$), and NRL was increased 33 times compared to the control group. Sensitivity, specificity, positive predictive value and negative predictive value in this cut-off value were respectively 83.33%, 84.44%, 58.80% and 95% (AUC: 0.878; 95% CI: 0.820-0.923).

Conclusion: 3 and above values of NRL may be used as diagnostic marker in support of the diagnosis of ovarian torsion.

Keywords: Ovarian torsion, neutrophile/lymphocyte ratio, NRL

Table 1. NRL cut-off and ROC Curve screening results

		Group				<i>p</i>	
		Study		Control			
NRL		n	%	n	%		
Cut-off	< 3.10	5	13.9	114	84.4	0.001	
	≥ 3.10	31	86.1	21	15.6		
		Sensitivity	Specificity	Positive Predictive Value	Negative Predictive Value	Area	95% Confidence Interval
Cut-off	≥ 3.10	83.33	84.44	58.80	95.00	0.878	0.820-0.923

[PP-131]

Successful resuscitation following amniotic fluid embolism during emergency lower segment caesarean section: A case report

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Objective: Amniotic fluid embolism (AE) is a rare and potentially fatal condition occurring in obstetric patients such as heart failure, which continues to have a high mortality rate; it is a leading cause of death during labor or shortly after birth.

Material and Methods: A 27 year old primigravida, at 39 weeks of gestation presented for emergency lower segment caesarian section (LSCS). After administering aspiration prophylaxis and intravenous crystalloids, she was given a subarachnoid block using 2.2 mL of 0.5% hyperbaric bupivacaine. In the ICU, patient was put on ventilator on CPAP with sedation I.V. loading dose of Phenytoin sodium, methylprednisolone 1gm I.V daily was started. LMWH therapy was continued and the patient was observed in the ICU till her discharge from the hospital.

Results: We report a case of AE occurring during the peri-partum period, in which due to expeditious cardiopulmonary resuscitation, both the mother and the newborn survived. High degree of suspicion and prompt action is mandatory for a favorable outcome in such scenarios Blood pressure (BP) was 140/90 mmHg, Heart rate (HR) was 100/min and Oxygen saturation (Spo2) was 100%. followed by a fall in BP to 80/40 mmHg from 130/80 mmHg. Oxygen saturation (SpO2) also decreased. On day 2 in the ICU, patient was conscious with stable vital parameters and no uprolling of eye balls or jerky limb movements. Weaning trial was started and the patient was extubated after FOUR hours. After extubation, HR was 88/ min, BP 120/70 mmHg, SPO2 100% and RR 24/min. On day 3 in the ICU, patient was drowsy, but arousable and a febrile. Pupils were normal sized and reactive to light, and movements of the limbs were normal. Muscle power grading was 3/5 in both upper and lower limbs. CT scan of the brain and pulmonary with pulmonary CT angiography were done. CT of chest, revealed uni-lateral right apical pulmonary hypo dense area. CT pulmonary angiography revealed the following: distension of post sub-segmental branch of right pulmonary artery supplying the region of superior segment of right lobe with hypodense filling defect suggestive of thrombus, with similar lesion on left. On day 4 in the ICU, the patient was conscious, oriented, was able to walk with support and allowed orally. Two-dimensional echocardiography was done which showed a normal study.

Conclusion: Amniotic fluid embolism is a near fatal condition unique to the obstetric population, where mortality rate continues to be high. It is usually a diagnosis of exclusion. Aggressive resuscitation, maintaining adequate oxygenation, empiric heparin therapy and supportive care are mandatory for a favorable outcome. On day 2 in the ICU

Keywords: Amniotic fluid embolism, Oxygen saturation, cardiopulmonary resuscitation, emergency lower

[PP-132]

Does Mode of Delivery Change Umbilical Cord Thymic Stromal Lymphopoietin Levels?

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Objective: Thymic stromal lymphopoietin (TSLP) is a cytokine released from epithelial cells and regulates inflammatory process. The aim of this study was to evaluate the association between the mode of delivery and umbilical cord TSLP levels.

Material and Methods: A total of 74 female patients were enrolled in the study. The subjects were classified into two groups as follows: the caesarean section group with 37 women and the vaginal delivery group with 37 ones. Exclusion criteria were multiple gestations, non-cephalic presentation, hypertensive disorders of pregnancy, premature rupture of membranes, fetal growth restriction and diabetes mellitus. Fetal blood sample was taken from fetal umbilical cord after birth. TSLP levels were measured.

Results: The groups were homogenous according to the patient characteristics. Age, gravida, parity, body mass index (BMI), hemoglobin levels, and gestational day on TSLP measurement day were evaluated but, there was no statistical difference. TSLP levels were significantly higher in caesarean section group than vaginal delivery group ($p < 0.05$).

Conclusion: Caesarean section seems to increase TSLP levels. However, the cause of this increase still remains unclear.

Keywords: Pregnancy, thymic stromal lymphopoietin (TSLP), caesarean section, vaginal delivery

[PP-133]

Increased oxidative stress is associated with insulin resistance and infertility in polycystic ovary syndrome

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Objective: The present study aims to investigate the role of oxidant-antioxidant status in young women who are diagnosed with polycystic ovary syndrome (PCOS).

Material and Methods: Forty-four women with PCOS and 27 healthy controls are compared in aspect of demographic characteristics, bio-

chemical data, hormones, and oxidant-antioxidant status.

Results: When compared with the healthy controls, the women with PCOS had significantly lower serum concentrations of zinc ($p=0.011$), significantly higher malondialdehyde ($p=0.009$), significantly higher glutathione peroxidase ($p=0.002$) and significantly lower catalase ($p=0.001$). When compared to the PCOS patients without insulin resistance, the PCOS patients with insulin resistance had significantly higher malondialdehyde, significantly lower catalase and serum zinc levels ($p=0.001$ for each). When compared to the fertile PCOS patients, the PCOS patients with infertility had significantly higher malondialdehyde, lower catalase and serum zinc levels ($p=0.001$ for each). There was a statistically significant and positive correlation between HOMA-IR and malondialdehyde values ($r=0.490$, $p=0.001$), between HOMA-IR and glutathione peroxidase values ($r=0.489$, $p=0.001$) and between HOMA-IR and zinc values ($r=0.593$, $p=0.001$). There was a statistically significant and negative correlation between HOMA-IR and catalase values ($r=-0.517$, $p=0.001$).

Conclusion: The patients with PCOS are under oxidative stress and this oxidative stress seems to be the highest in patients with insulin resistance and patients with infertility. Despite the prominent increase in the oxidative stress, there was a variation in the antioxidant response which could be attributed to the differences in the demographic and genetic differences in the expression of antioxidant enzymes.

Keywords: Infertility, insulin resistance, oxidative stress, polycystic ovary syndrome

[PP-134]

Levonorgestrel intrauterine device reduces uterine fibroid size and improves related symptoms

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Objective: The present study aims to compare the efficacy and safety of levonorgestrel intrauterine device (LNG-IUD) and medroxyprogesterone acetate (MPA) in the treatment of bleeding and pain associated with uterine leiomyomas.

Material and Methods: Thirty women who accepted the administration of LNG-IUD formed the LNG-IUD group while 30 women who accepted to be treated by a single intramuscular injection of 150 mg MPA made up the MPA group. Both groups were compared in aspect of demographic, clinical and biochemical characteristics.

Results: The women in the LNG-IUD and MPA groups had statistically similar demographic, clinical and biochemical characteristics at the beginning of treatment. At the end of three months, the LNG-IUD group had significantly smaller fibroid size, lower visual analogous scale (VAS) score, less dysmenorrhea and less dyspareunia than the MPA group ($p=0.022$, $p=0.044$, $p=0.045$ and $p=0.038$ respectively). After three months of LNG-IUD treatment, fibroid size was significantly smaller; menstrual blood loss, VAS score and frequency of dysmenorrhea were significantly lower, and serum concentrations of hemoglobin, ferritin and iron were significantly higher ($p=0.003$, $p=0.001$, $p=0.001$, $p=0.005$,

$p=0.005$ and $p=0.001$ respectively). After three months of MPA treatment, menstrual blood loss and VAS score were significantly lower and serum levels of hemoglobin, ferritin and iron were significantly higher ($p=0.001$, $p=0.001$, $p=0.005$, $p=0.005$ and $p=0.001$ respectively).

Conclusion: LNG-IUD appears as a good alternative to progestagens for the reduction in fibroid size, related menstrual blood loss and associated pelvic pain.

Keywords: Hypermenorrhea, leiomyoma, levonorgestrel intrauterine device, medroxyprogesterone acetate, pelvic pain

[PP-135]

Successful treatment of uterine arterio-venous malformation

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Introduction: Uterine arterio-venous malformation (AVM) is defined as abnormal and non-functional connections between the uterine arteries and veins. Acquired AVMs are often associated with previous uterine surgery (dilation and curettage (D/C)), therapeutic abortion, cervix or endometrial cancer, trophoblastic diseases, and direct uterine trauma, and occurs more frequently in women at reproductive age. Typical symptom is vaginal bleeding; however, some patients may present with life-threatening massive bleeding.

We report a case of acquired AVM (after D/C) with an extensive lesion, which was successfully treated with UAE.

Case: A 35-year-old patient, gravida 2, para 1, abortion 1, underwent D/C two weeks before in another center due to missed abortion. The patient underwent repeat D/C procedure at control visit one week after initial intervention in another center with a suspected hematoma; however, the procedure had been discontinued due to hemorrhage and the patient was referred to our hospital. Upon admission, Hb was 11.2 g/dL and Htc was 35.1%. There was no evidence of active vaginal bleeding. Transvaginal ultrasonography (TVUSG) revealed a 60×60×56 mm (103 cm³) hyperechogenic, heterogeneous mass lesion located in the anterior wall of the uterus and extending laterally at the left. There was minimal fluid collection in the endometrial cavity. The adnexes bilaterally appeared normal. Doppler ultrasonography revealed prominent venous vascular signals (Figure 1). The patient was hospitalized with the diagnosis of arterio-venous malformation. A consultation with an interventional radiologist was performed and the patient was scheduled for UAE. Pre- and post-embolization images of the patient are shown in Figure 2. No complications occurred after the procedure and the patient was discharged two days after the procedure. Control Doppler USG performed one month later and revealed no blood flow and the lesion was measuring 61×46×52 mm (77 cm³) and showing shrinkage.

Discussion: Uterine AVMs have an important place in gynecology practice due to risk of massive bleeding that could be life threatening in some patients. These can be either congenital or acquired (traumatic) lesions. The present case developed uterine AVM secondary to



Figure 1. Sagittal endo-vaginal image of the uterus shows 60×60×56 mm (103 cm³) hyperechogenic, heterogeneous mass lesion located in the anterior wall of the uterus and extending laterally at the left (a), Color Doppler image shows multiple tortuous vessels (b)

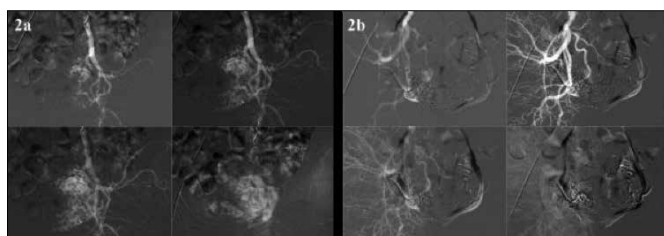


Figure 2. Uterine artery angiography showing opacification of a slightly enlarged right uterine artery and hypervascular mass in the uterus (a), post-embolization angiographic image (b)

past uterine trauma (D/C). In today's practice, AVM is easily diagnosed using color Doppler ultrasonography. MR angiography is a useful diagnostic tool in elucidating the relation of AVMs with the neighboring organs and differentiating these lesions from gestational trophoblastic diseases. The treatment changes depending on the age, desire for future fertility, localization and size of the lesion; however, embolization of the uterine artery (UAE) remains the first choice of treatment in women at reproductive age having expectation for future fertility. In conclusion, the patient presented in this case report had AVM that developed secondary to previous uterine surgery and underwent repeat intervention during control visit with suspicion of hematoma and retained products of conception; however, this final intervention resulted in an abundant bleeding. It must be kept in mind that patients may develop AVM following evacuation of uterus for pregnancy loss and the possibility of AVM must be considered in differential diagnosis.

Keywords: Uterine arteriovenous malformation, uterine artery embolization, uterine trauma

[PP-136]

Link between the obesity and insulin resistance with lipid profile in women polycystic ovary syndrome

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Objective: To investigate the effects of obesity and insulin resistance in polycystic ovary syndrome (PCOS) on lipid profile, a risk factor for cardiovascular diseases

Material and Methods: For this prospective study 55 patients with PCOS and 41 healthy women were included. History, physical examination, body mass index (BMI) and ultrasonographic findings were recorded. Venous blood samples for hormonal and biochemical tests were taken from study groups, with regular menses in the follicular stage and in any stage in women with amenorrhea. Insulin resistance is calculated by using the homeostasis model assessment-insulin resistance (HOMA-IR). The cut-off value for HOMA-IR was accepted as ≥ 2.5 .

Results: BMI, HOMA-IR, low-density lipoprotein (LDL) cholesterol and triglyceride (TG) levels were significantly higher, high-density lipoprotein (HDL) cholesterol levels were significantly lower in PCOS patients when compared to controls. Although total cholesterol/HDL cholesterol ratio was higher in PCOS patients, the difference was not statistically significant. TG levels in PCOS patients were more strongly correlated with HOMA-IR than BMI ($r=0.335$, $p=0.012$; $r=0.270$, $p=0.046$ respectively). Besides TG levels, BMI were positively correlated with insulin ($r=0.444$, $p=0.001$) and HOMA-IR ($r=0.418$, $p=0.001$); as HOMA-IR increases fasting blood glucose, fasting insulin levels, TG and LDL cholesterol levels were found to be increased. There was no linear correlation between BMI and total cholesterol and LDL cholesterol in both groups. A positive correlation between TG and total cholesterol levels ($r=0.506$, $p=0.001$), and a negative correlation between TG and HDL cholesterol ($r=-0.423$, $p=0.001$) were detected.

Conclusion: BMI, HOMA-IR, TG, LDL cholesterol levels were significantly higher and HDL cholesterol levels were lower in PCOS patients than controls. High triglyceride levels were strongly correlated with HOMA-IR. Insulin resistance and lipid profiles should be evaluated and necessary precautions should be taken to prevent the occurrence of type 2 diabetes mellitus, cardiovascular and metabolic diseases in the long term.

Table 1. The average values of hormonal and biochemical results of the study and control group

	Control (n=48)	BIS (n=50)	p
Estradiol (pg/mL)	68.21±85.09	53.37±48.20	0.319
LH (mIU/mL)	16.47±18.44	7.45±4.40	0.001
Prolactin (ng/mL)	17.64±7.06	16.05±7.77	0.298
Insulin (mIU/mL)	18.53±12.03	7.63±3.57	0.001
Glucose (mg/dL)	93.69±8.40	89.75±6.51	0.014
BMI (kg/m ²)	28.01±4.63	24.08±3.42	0.01
LH/FSH	2.68±1.72	1.20±0.57	0.01
HOMA-IR	4.35±2.96	1.63±0.86	0.01
Triglyceride	119.61±87	87.29±58.69	0.043
LDL-C	106±30.88	89.50±31.00	0.007
Total-C	170.56±28.72	180.19±37.23	0.156
HDL-C	55.07±16.72	62.82±20.76	0.001
TSH	50.92±28	45.26±18	0.001
Total-C/HDL-C	3.62±1.29	3.21±1.33	0.130
HOMA-IR: homeostasis model assessment-insulin resistance; C: cholesterol			

Table 2. Hormones and chemical values of the correlation between BMI and HOMA-IR in study and control groups

Study group		p	r	Control group		p	r
BMI	HOMA-IR	0.001	0.418	BMI	HOMA-IR	0.060	0.300
BMI	Glucose	0.149	0.197	BMI	Glucose	0.847	0.031
BMI	Insulin	0.001	0.444	BMI	Insulin	0.106	0.259
BMI	Triglyserid	0.046	0.270	BMI	Triglyserid	0.085	0.276
BMI	Total-C	0.709	0.051	BMI	Total-C	0.272	0.178
BMI	LDL-C	0.422	0.110	BMI	LDL-C	0.868	0.076
BMI	HDL-C	0.088	-0.232	BMI	HDL-C	0.041	-0.325
BMI	LH	0.008	0.356	BMI	LH	0.513	0.108
BMI	LH/FSH	0.012	0.336	BMI	LH/FSH	0.179	0.218
HOMA-IR	Glucose	0.001	0.430	HOMA-IR	Glucose	0.002	0.462
HOMA-IR	Insulin	0.001	0.980	HOMA-IR	Insulin	0.001	0.908
HOMA-IR	Triglyserid	0.012	0.335	HOMA-IR	Triglyserid	0.014	0.380
HOMA-IR	Total-C	0.275	0.150	HOMA-IR	Total-C	0.579	0.089
HOMA-IR	LDL-C	0.868	0.023	HOMA-IR	LDL-C	0.101	0.259
HOMA-IR	HDL-C	0.013	-0.386	HOMA-IR	HDL-C	0.060	-0.232
HOMA-IR	LH	0.098	-0.225	HOMA-IR	LH	0.924	-0.015
HOMA-IR	LH/FSH	0.162	0.191	HOMA-IR	LH/FSH	0.321	0.159
Triglyserid	HDL-C	0.001	-0.423	Triglyserid	HDL-C	0.001	-0.482
Triglyserid	HOMA-IR	0.012	0.335	Triglyserid	HOMA-IR	0.001	0.536
Triglyserid	Insulin	0.017	0.321	Triglyserid	Insulin	0.009	0.404
Triglyserid	LH	0.039	-0.279	Triglyserid	LH	0.750	-0.052
Total-C	LH	0.990	0.002	Total-C	LH	0.656	0.073
Total-C	Triglyserid	0.001	0.506	Total-C	Triglyserid	0.090	0.268
Estradiol	LH	0.014	0.330	Estradiol	LH	0.991	0.002
Insulin	HDL-C	0.002	-0.466	Insulin	HDL-C	0.090	-0.231

Keywords: Cardiovascular disease, insulin resistance, lipid profile, obesity, polycystic ovary syndrome

[PP-137]

A syrian woman who has cephalothoracopagus conjoined twinning

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Summary: Conjoined twinning is a very rare separation abnormality, which is associated with postpartum morbidity and mortality. The possibility of conjoined twins should be carefully evaluated during follow-up examinations of especially monozygotic twin pregnancies. Notably, detailed examinations are necessary for Syrian patients, who

frequently display fetal anomalies in recent years. Here, we investigated the 'conjoined twins' phenomenon, which we came across with in a Syrian patient with no previous examination records in our clinic, in relation to the current literature.

Introduction: Conjoined twinning is a rare complication, which occurs due to inadequate separation of growing embryo. The incidence of conjoined twins is estimated to range from 1 in 50.000 live births to 1 in 100,000 live births. Based on the parts at which bodies are attached, conjoined twins are generally classified as thoracopagus, cephalopagus, parapagus, ischiopagus, and omphalopagus. In this study, we examine an incidence of conjoined twins of a Syrian patient who came to our clinic, in relation to the current literature.

Case: A 21-year-old Syrian patient, who has already had a child by normal vaginal birth, came to our clinic as a result of throes. Physical examination involved a fully open and effaced vaginal touch. During ultrasonography (USG), a monozygotic twin pregnancy, evidenced by heartbeats of both fetuses connected by head and thorax, was observed. The USG measurements of the patient, who had no previous examination records, were in line with a 27-weeks pregnancy. The patient underwent a Cesarean section in emergency. Physical examination of fetuses proved a cephalothoracopagus conjoined twinning; with two separate pairs of arms and legs. Although cardiac beats of the twins had been detected, the patients developed cardiac arrest due to limited respiration and died.

Discussion: Conjoined twinning is a very rare congenital abnormality, and conjoined twins are of great interest due to their various anatomical structures. Conjoined twinning is an abnormality with high mortality rate. Thirty-five percent (35%) of all patients are lost within the first 24 hours of their lives. The highest mortality rate is among the thoracopagus, craniopagus and omphalopagus twins. The most reliable method for in utero diagnosis is ultrasonography. Upon diagnosis of conjoined twins, the case should be discussed with the patient. If the diagnosis corresponds to an early stage of pregnancy,



Figure 1. Twins



Figure 2. Conjoined twins

known as vitality borders, it is advised to terminate the pregnancy. If a patient persists in continuum of the pregnancy, the patient should deliver her twins in a center, which provides both a newborn and a pediatric specialist. To minimize the possible injuries to mother or to twins, cesarean section is the preferred delivery method in pregnancies close to the term.

Recently, Syrian patients who visit our clinic quite often constitute the most frequent difficult task in terms of follow-up examinations due to a lack of early diagnosis. Both a lack of follow-up examinations leading to late diagnosis and several fetal malformations possibly due to chemicals used in wars, considerably complicate our practical approach towards Syrian patients in a daily basis

Keywords: Cephalothoracopagus, conjoined twin, syrian people

[PP-138]

Endometrial osseous metaplasia: A rare cause of postmenopausal hemorrhage

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Metaplasia is the reversible exchange of a certain cell type with another mature differentiated cell type. Osseous metaplasia defines the mature bone elements in extra-skeletal tissues. It may occur at any part of the body and it is very rare. This rare finding was reported in some tissues and neoplasias of various organs. Bone metaplasia



Figure 1. Endometrial calcification on ultrasonographic appearance



Figure 2. The appearance of the bone structure in the macroscopic appearance of the endometrial cavity

of endometrium is a benign lesion which is rare between the ages of 20 and 40, usually related to a previous abortion and may lead to secondary infertility, it is very rare among post-menopausal women. A women who had 9 normal vaginal deliveries, two abortions within the first trimester of which the second was 8 years ago, who had 2 years of menopause was admitted with complaint of vaginal hemorrhage which occurred 10 days ago. Malignancy and foreign body were considered in differential diagnosis depending on clinical and pathologic findings and we aimed to discuss this endometrial osseous metaplasia under the light of the literature.

Keywords: Osseous metaplasia, endometrial, postmenopausal hemorrhage, secondary infertility

[PP-139]

Comparison of birth outcomes of pregnant women receiving antenatal training and not

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Introduction: In many parts of the world antenatal Training is recommended for pregnant women and their partners. These programs aim to increase breastfeeding success, cope with pain and stress during childbirth, build women's confidence in their ability to give birth, improve maternal psycho-social health, prepare women and their partners for childbirth and parenthood and develop social support networks. The aim of the study is to compare the child birth process of those women who received antenatal Training with those of prepa-

nant women who did not take antenatal education.

Material and Methods: A retrospective study was designed between September 2010 and December 2013. We reviewed the labour records of 52 pregnant women who received antenatal Training and 363 women who did not. Exclusion criteria were pregnancy with complications like hypertension, gestational diabetes, preeclampsia, placenta previa, previous cesarean section, multiple pregnancy, multiparity, breech, transverse and compound presentation, preterm birth, still birth, delivering at a different health center. The data were obtained from patients files from the hospital archive.

Results: The findings indicate that women who received antenatal Training were statistically significantly older than the women who did not receive antenatal Training ($p < 0.001$). No statistically significant differences were found in the initial characteristics of the two groups of patients in terms of chronic disease, smoking in pregnancy, estimated gestational age using last menstrual period and ultrasonography ($p > 0.05$). Among two groups, there were no statistical differences in the mean birth weight, estimated birth weight, the mode of delivery and the indications for cesarean section ($p > 0.05$). Women who received antenatal Training and were admitted to the hospital with complaints of uterine contractions instead of preterm rupture of membranes, had more cervical dilatation compared to women who did not receive antenatal Training ($p = 0.022$). No statistically significant differences were found between two groups in the mean length of first and second stage of labor, frequency of episiotomy, 1st and 5th minutes Apgar scores of the newborn, the changes in hemoglobin and hematocrit values at birth, the length of hospitalisation, the complications experienced in the birth and in the postpartum period and neonatal intensive care needs ($p > 0.05$).

Conclusion: Our study is the first one comparing the changes in hemoglobin and hematocrit values at birth, the length of stay in hospital and neonatal intensive care needs between a group of women with antenatal Training and another group of women with no antenatal Training. The findings of this study may be affected by the fact that the birth process is followed by the doctors and in case of emergency medical interventions would be made of regardless of the consent of the pregnant women. The antenatal Training would be effective in terms of psychological support and it may decrease subjective complaints. Although the existing findings are not conclusive, if the future studies demonstrate more benefits of the antenatal Training, more countries may utilize the Training and include the antenatal Training in antenatal care programs.

Keywords: Antenatal, training

[PP-141]

A case of pelvic tuberculosis presenting as an ovarian malignancy

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Introduction: The initial diagnosis considered in a woman presenting with an adnexial mass, ascites, and elevated CA125 levels is ovarian malignancy. Patients diagnosed with ovarian malignancy generally

undergo radical surgery including hysterectomy and bilateral oophorectomy. However disseminated tuberculosis infection may rarely present with similar findings and is usually treated successfully with medical therapy.

Case: A 20 year old virgo patient presented with left lower abdominal pain for a duration of one month. She denied any history of surgery or systemic infection, weight loss, fever or menstrual irregularity. On physical examination she had bilateral lower abdominal tenderness and left adnexial fullness. On ultrasonography a 10cm cystic mass with a solid component was detected on the left adnexial area (Figure 1). The complete blood count and serological markers were within normal limits. The CA125 and CA 15-3 levels were 165 U/mL and 70.3 U/mL, respectively. No pathological findings were evident on her chest X-ray. Abdominal MRI showed a 85x 54x73 mm thick walled septate cystic mass with a 2cm solid component (Figure 2). She underwent laparotomy with an initial diagnosis of ovarian malignancy. At laparotomy an adnexial abscess and many sites of pelvic miliary infection were detected. The abscess drainage material was sent for culture and the frozen section analysis of biopsy specimens revealed chronic granulomatous infection resembling tuberculosis. The detailed histopathological examination of the biopsy specimens obtained from the peritoneum revealed caseifying granulomatous inflammation and fibrosis (tuberculosis peritonitis). Culture results were negative and no microorganisms were detected microscopically, however the PCR was positive for tuberculous bacilli. The patient was prescribed anti-tuberculosis treatment postoperatively.

Discussion: Abdominopelvic tuberculosis is a form of extrapulmonary infection involving the female genital and intestinal tracts. It most commonly affects women between 20 and 40 years of age and is mostly asymptomatic, although abdominal distention, ascites, fever, and weight loss may be encountered. Patients with genital tract involvement may present with infertility, menstrual irregularity or chronic lower abdominal pain. The preoperative diagnosis of pelvic tuberculosis is not easy. Up to 40% of patients with extrapulmonary tuberculosis have normal findings on chest X-rays. PPD, ultrasonography, MRI and CT imaging may help in the differential diagnosis, however findings are often nonspecific. The gold standard for diagnosis is culture and isolation of the pathogen. Measurement of ascites fluid ADA levels and PCR may especially be helpful in the diagnosis. If these tests are negative, surgery may be carried out and frozen section anal-

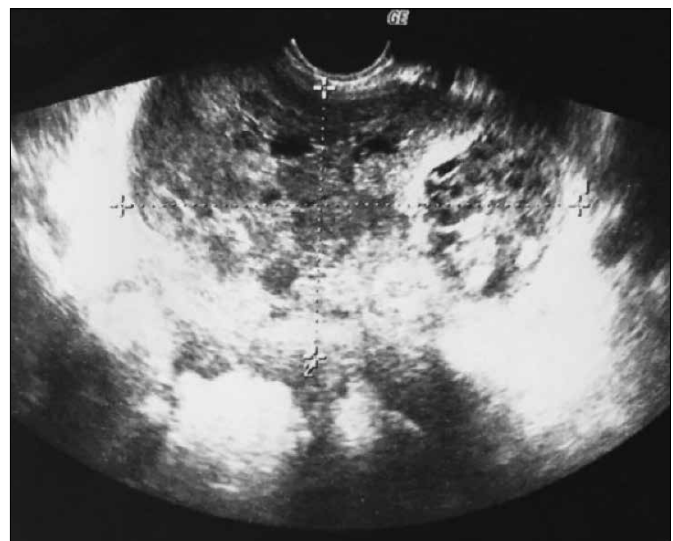


Figure 1.

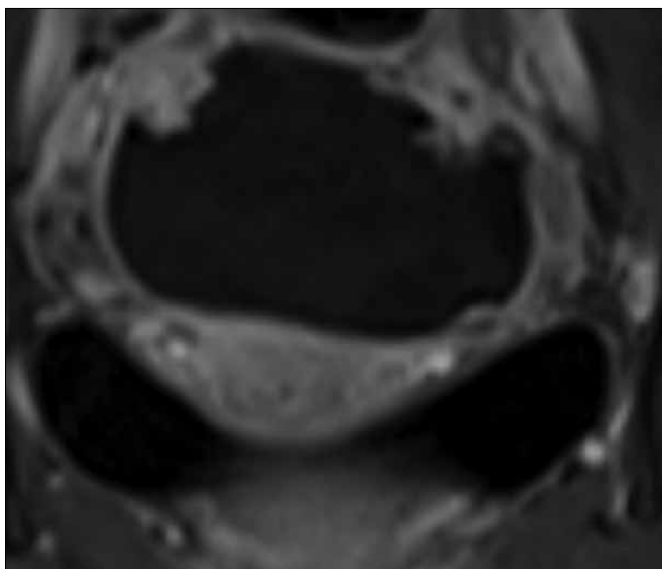


Figure 2.

ysis of biopsy specimens obtained from suspicious areas may allow definitive diagnosis preventing any unnecessary major surgery. CA125 levels have been shown to decrease in response to medical treatment in patients with abdominopelvic tuberculosis and has been suggested as a useful marker for monitoring response to treatment in such patients. In conclusion, the diagnosis of abdominopelvic tuberculosis should be kept in mind in the differential diagnosis of an adnexial mass, ascites and elevated CA125 levels, especially in young women with a family history of tuberculosis and those living in countries where tuberculosis is endemic.

Keywords: Adnexial mass, Ca 125, pelvic abscess, peritoneal tuberculosis

[PP-145]

Postmenstrual bleeding due to uterine niche: A case report

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Background: In recent years, the incidence of caesarean sections increased and occurrence of the phenomenon 'niche', also defined as cesarean scar defect, has attracted attention. Incidence of niche is directly related to the number of previous caesarean section. Uterine niche is a reservoir-like pouch defect on the anterior wall of the uterine isthmus, located at the site of a previous caesarean section scar and may cause a wide range of gynaecological symptoms such as postmenstrual uterine bleeding, dysmenorrhea, chronic pelvic pain, dyspareunia and secondary infertility. Approximately 30% of women with niche have spotting at 6–12 months after their caesarean section and surgical repair may improve symptoms. Here we presented a case with postmenstrual spotting due to uterine scar defect that was treated by laparotomic approach.

Case: A 25-year-old woman, gravida 2 para 2, applied to our clinic due to complaints of postmenstrual bleeding that was refractory to medical treatment and dysmenorrhea that started after the caesarean delivery and continues for the last two years. She had two previous caesareans. Her symptoms were irreducible and unresponsive to treatment. On the gynecological examination was normal. Ultrasonography that revealed a uterine scar defect of 8x3 mm anechoic area (uterine niche) within the myometrium of the lower uterine segment and residual myometrium thickness of 1,5 mm (Figure 1). The serum β hcg <2 mU/mL, thyroid function tests, coagulation profile, complete blood count, prolactin level and cervicovaginal smear results were normal. The laparotomic repair of scar is decided. Because niche location was very close to the cervix and myometrial thickness was very thin. The surgery is undertaken as described; after reflection of the bladder flap, the lower uterine segment section, including the defect, was removed, and the hysterotomy is closed with two, single synthetic absorbable sutures. The 1.5x1x1 cm-area which was compatible with niche is determined in the laparotomy on the scar line of old caesarean section. The blood material accumulated in the pouch (niche) was defined (Figure 2). The levonorgestrel (LNg) intrauterine device (IUD) is placed inside the uterus for its anti-adhesive, contraceptive and hormonal effects. The device is removed two months



Figure 1. Ultrasonographic image of niche

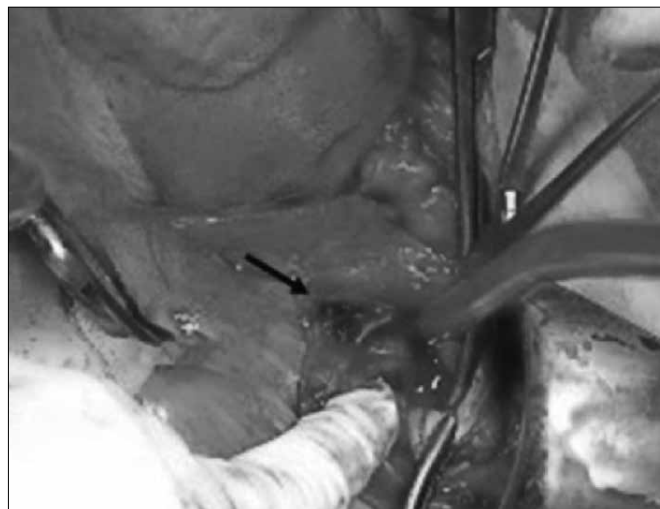


Figure 2. Intraoperative view of niche

later. The diagnosis is confirmed by pathology and no endometriotic lesion detected on specimen. No complication is encountered in postoperative period. The patient reported complete resolution of her gynecological symptoms after surgery.

Conclusion: Uterine niche should be kept in mind for differential diagnosis of patients with postmenstrual spotting and a previous cesarean section. The literature does not contain sufficient data about the issue and more studies are required.

Keywords: Cesarean section, niche, postmenstrual bleeding

[PP-146]

Severe spontaneous ovarian hyperstimulation syndrome with cervical insufficiency and its management: A case report

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Background: Severe form of spontaneous OHSS (sOHSS) is a rare entity in singleton pregnancy and may cause laparotomy because of misdiagnosis such as ovarian tumors or severe complications. We present a rare case of severe OHSS complicated with cervical insufficiency in singleton spontaneous pregnancy.

Case: A 21-year-old primigravid, conceived spontaneously, presented to our clinic at 11 weeks of gestation with the complaints about severe abdominal pain, progressive abdominal swelling and dyspnea. Her medical or surgical disease and family history was unremarkable. She hadn't had any medication for ovulation induction. Her menstrual period was regular. Ultrasound revealed singleton, alive intrauterine an 11 week pregnancy with bilateral enlarged multicystic ovaries and a large amount of ascitic fluid in the pelvis and abdominal cavity (Figure 1) consistent with severe sOHSS. Right ovary was measured 17 cm in long axis diameter and left one 16 cm (Figure 2). Preliminary blood tests revealed a hematocrit of 36.2%, white blood cell count of 10,660/mm³, sodium of 128 mmol/L, potassium of 4.5 mmol/L, calcium of 8 mg/dL, serum hCG of 630,631 mU/mL, total testosterone of 258 ng/dL, with other blood results including TSH within normal limits. She was admitted to hospital and managed with intravenous fluid replacement, albumin infusion, hydroxyethyl starch (HES), low molecular weight heparin for thromboprophylaxis with carefully monitored over the course of her stay by her symptoms, body weight, abdominal circumference, ultrasonography and laboratory tests. We obtained molecular genetic analysis and demonstrated that she was homozygous for PAI-1 4G/5G gene. There was no available testing method for FSH receptor mutation in our hospital. There wasn't any pathological finding on pituitary MRI.

After three days, peritoneal fluid was drained by abdominal catheter about 1000-2000 mL/day to reduce the patients' discomfort and performed meticulous fluid balance daily. There were no malignant cells on cytology. Cabergoline 0.5 mg/day treatment was started. After three weeks from catheterization, abdominal ascites

were decreased and catheter removed. The first trimester combined test result was 1/276 risk and fβhCG was 3.93 MoM. At 16 weeks, amniocentesis and chorionic villous sampling were performed due to placental appearance and possible terms of molar gestation or a chromosomal abnormality. Karyotype and placental histopathology were normal.

At seven weeks after admission, her complaints were dissolved. Ultrasonography revealed that normal size of ovaries without ascites. She was discharged and followed up outpatient.

At 22+3 week of pregnancy, she underwent cerclage due to cervical failure with Y formation. The pregnancy progressed to term and a healthy female baby of 3400 g was delivered at 40 weeks of gestation. Postoperative placental histopathology was normal. Four weeks after delivery, on sonographic examination, both ovaries were normal and βhCG was negative. She was managed expectantly with no complications.

Conclusion: Our case, as well as literature data, indicates the importance of early diagnosis and successful management in pregnant women with sOHSS which may develop rapidly and may lead to significant morbidity and mortality if left untreated.



Figure 1. Wide spread free ascitic fluid in the pelvis and abdominal cavity



Figure 2. Bilateral enlarged ovaries containing multiple cysts

Keywords: Ascites, pregnancy, spontaneous ovarian hyper stimulation syndrome

[PP-147]

Review of fetal lower urinary tract obstruction: Four years' experience in our perinatology department

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Background: Lower urinary tract obstruction (LUTO) is a serious condition in utero. While mild forms of the disease may lead to minimal clinical sequelae, the more severe forms commonly lead to oligohydramnios, a distended urinary tract, renal dysplasia, as well as pulmonary hypoplasia. The incidence of LUTO has been reported to be between 1 in 5,000 to 1 in 25,000 pregnancies. The overall mortality is 50-60%. Current perinatal management options for LUTO are expectant management, termination of pregnancy and treatment options for fetuses with a favorable prognostic indicators and oligohydramnios includes vesicoamniotic shunting (most commonly used), valve ablation via cystoscopy and vesicostomy. We reviewed the prenatal management and pregnancy outcome of fetal lower urinary tract obstruction (LUTO) in our clinic.

Material and Methods: 205,708 pregnant women were examined in our clinic at last four years. At the same time, 536 pregnant women were detected who having fetuses with urinary abnormalities. This review of eight fetuses with LUTO in our center between January 2012 and March 2016 were included retrospectively. All cases of suspected fetal LUTO were assessed for individual fetal prognosis and treatments such as vesico-amniotic shunting.

Results: Our LUTO incidence was 1.4% in all urinary tracts anomalies in four years period at our clinic. Of the eight fetuses with LUTO that were included in the analysis, vesicoamniotic shunting was performed in two, termination was opted by family in two, ongoing pregnancy in two and there was no fetal intervention in two because of fistulisation to rectum or patent urachus. One of the fetuses that we performed vesicoamniotic shunt was Prune Belly Syndrome. Vesicoamniotic shunt operation is performed twice for this fetus. This baby had a cystoscopic valvuloplasty operation at postpartum four month. Gestational ages at diagnosis were between 17-28 weeks. Only urethral agenesis was female, all other were male. All fetuses with LUTO had normal karyotype. Delivery is performed at term except terminations. No baby required neonatal intensive care unit. LUTO was confirmed in four of four live-born fetuses.

Conclusion: LUTO is a rare condition and often associated with high perinatal mortality and significant perinatal and infant morbidity. Despite high morbidity, vesico-amniotic shunting offers patients faced with a poor prognosis an improved chance of survival. In LUTO, early diagnosis, interventional management for selected cases and timely delivering of mature fetuses are mandatory for without handicap and infant well being.

Keywords: Lower urinary tract obstruction, vesicoamniotic shunting

[PP-148]

Prenatal ultrasonographic diagnosis of bilateral duplex renal system: A case report

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Introduction: Duplex kidney is one of the most common major congenital abnormalities of the urinary tract. It's incidence is 1% of all live births with higher frequency in females than in males. The majority of duplex kidneys are unilateral. Although the antenatal diagnosis of fetal hydronephrosis is simple, the diagnosis of fetal renal duplication is infrequent, especially in case the collecting system is not dilated. Here we reported bilateral duplex collecting system in utero.

Case: A 23-year-old woman, gravida 3, para 1, was referred at 25weeks' gestation after detection of multiple anechoic masses in the fetal abdomen. Her medical and obstetric histories were unremarkable and the pregnancy had been otherwise uncomplicated. At referral, sonographic examination revealed a singleton male fetus with biometric measurements consistent with dates, posterior located placenta and normal amniotic fluid volume. Detailed examination of the fetal anatomy revealed bilateral duplex kidneys (Figure 1) with unilateral severe hydronephrosis of the upper pole of right side; the renal upper pole AP was measured 18 mm, proximal ureter was measured 5.5 mm and distal ureter was 3.7 mm. The diameter of the right kidney was 50x22x33 mm. The ureter draining the upper moiety of right side were dilated, and the fetal bladder appeared septated, although a closer examination revealed one 3,8 mm tortuous, sac like structures protruding into the fetal bladder (ureterocele) and filling it almost completely (Figure 2). There was no other system additional structural anomaly. Fetal cardiac examination revealed normal findings. Fetal blood sampling revealed a normal 46,XY karyotype. Pregnancy is ongoing uneventful.

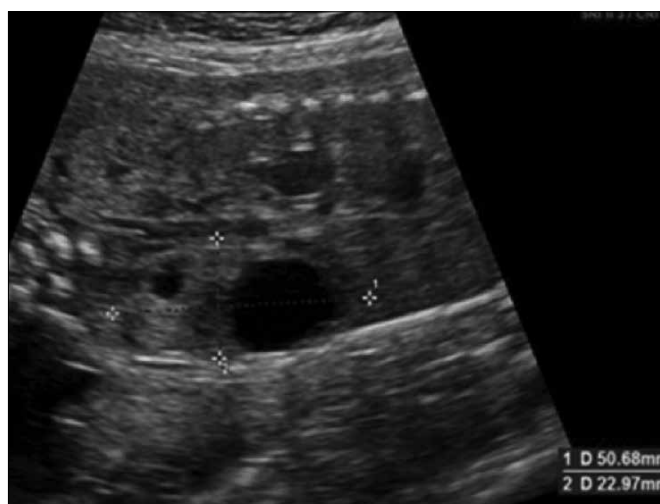


Figure 1. Coronal view of the both kidneys with duplicated collecting system



Figure 2. View of the the urinary bladder with ureterocele

Conclusion: Fetal hydronephrosis due to double collecting system should be kept in mind in the differential diagnosis of abdominal cystic structures especially with ureterocele. A correct diagnosis allows appropriate counseling of the parents, who can be reassured that duplex renal system generally is not associated with extrarenal abnormalities or chromosome aneuploidy, and that the condition has a favorable prognosis even with bilateral involvement.

Keywords: Duplex kidney, ureterocele

[PP-149]

Review of comparison of McDonalds and modified McDonalds cerclage methods performed in our hospital in last four years

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Introduction: Definitions of cervical incompetence vary, but one that is frequently used is the inability of the uterine cervix to retain a pregnancy in the absence of the signs and symptoms of clinical contractions, or labor, or both in the second trimester. Cervical incompetence can be treated using cervical cerclage, a surgical technique that reinforces the cervical tissue by placing sutures above the opening of the cervix to narrow the cervical canal. Despite of Mc Donalds and Shirodkar cerclage methods exist through transvaginal and transabdominal route, the effectiveness of methods, and the question, does cerclage prevent cervical insufficiency or not is still open. High failure rate of cerclage procedure may be associated to not only simple mechanical weakness of cervix but also to hormonal and infectious factors, which lead to destabilization of cervical structure through complex mechanisms. To reduce the infectious and foreign body factor and improve the efficacy

Table 1.

Cerclage method	N	Mean Rank	Sum of Ranks
McDonalds	8	4,75	38,00
Modified McDonalds	11	13,82	152,00
Total	19		

Table 2.

Test methods	Cerclage method
Mann-Whitney U	2,000
Wilcoxon W	38,000
Z	-3,471
Asymp. Sig. (2-tailed)	,001
Exact Sig. [2*(1-tailed Sig.)]	,000
p<0.05 Mann-Whitney U for our research is 19	

of McDonalds techniques we use modified McDonalds technique.

Material and Methods: During the period from April 2012 to December 2015, there were 19 cases of cervical insufficiency which treated with cerclage placement. The diagnostic criteria's used to confirm cervical insufficiency are: cervical length, funneling, prior history of at least two preterm births, surgical operations performed on cervix. From 19 cases 8 performed by McDonalds and 11 by Modified McDonalds technique. The Modified McDonalds methods principal difference from Classic McDonalds method is that suture almost completely passes under mucosal layer, to achieve this input and output points of suture should coincide and left no suture material over mucosa, vaginal mucosa opened only above knot site, knot is immersed and mucosal defect is closed. In our study we compared complication rates and pregnancy prolongation time in each technique.

Results: Participated patients mean age is 32 (22-47). The mean gestational age in McDonald's group is 18 weeks (14w - 30w) in Modified McDonalds group mean gestational age is 19 weeks (13w-24w). In McDonalds group mean prolongation time was 11 weeks and 50% cases resulted in PROM. In Modified McDonalds group mean prolongation time was 19 weeks, and only one pregnancy (8%) resulted with PROM. No complications were detected in both groups during procedures.

Conclusion: According to our preliminary results it seems that Modified McDonalds method is more effective treatment method of cervical insufficiency due to reduced infectious component. But the number of patients and heterogeneity of group could influence the results. We will continue our study for more precise results.

Keywords: Cerclage, McDonalds, modified McDonalds

[PP-153]

Is it essential to perform colposcopy for all patients who have abnormal cervical cytology?

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Objective: Cervicovaginal cytology, abnormal results of which consists of premalignant or malignant cervical lesions, is a widely used, cost effective and efficient screening tool for early diagnosis of cervical lesions. The aim of the study is to evaluate the colposcopic biopsy results of patients who have abnormal cervicovaginal cytology and to define whether colposcopy is essential for all abnormal results.

Material and Methods: This prospective study was conducted in Sisi Hamidiye Etfal Research and Training Hospital, Gynecology Outpatient Clinic. One hundred and five patients who have smear results of ASCUS, AGC, ASC-H, LSIL, HSIL and undergo cervical biopsies during colposcopy examination were admitted to our study. Age, gravida, parity, age at first coitus, smoking status and pathologic colposcopy findings and biopsy results were recorded.

Results: Mean age of patients was 39 ± 5.2 years. Mean parity was 4.82 ± 2.54 and mean gravida was 5.41 ± 3.68 . Of the patients, 21 (20%) were smokers. Mean age at first coitus was 22 ± 7.34 years. According to the classification of Bethesda, cervicovaginal smear results were as follows: ASCUS in 56 (53.3%) patients, LGSIL in 32 (30.5%) patients, HGSIL in 14 (13.3%) patients, ASC-H in 2 (1.9%) patients and AGC in 1 (0.9%) patient. When colposcopic biopsy results of the patients were evaluated, out of 56 ASCUS cases; chronic cervicitis was detected in 39 (69.6%) cases, CIN-I was detected in 13 (23.2%), CIN-II in 2 (3.6%) cases, CIN-III in 1 (1.8%) case and invasive cancer was detected in 1 (1.8%) case. Of 32 patients who had LGSIL; 21 (65.6%) had chronic cervicitis and 11 (34.4%) had CIN I. Out of 14 HGSIL cases; chronic cervicitis was detected in 2 (14.3%) cases, CIN-I was detected in 2 (14.3%), CIN-II in 3 (21.4%) cases, CIN-III in 6 (42.8%) cases and invasive cancer was detected in 1 (7.2%) case. Chronic cervicitis was detected in both patients who had ASC-H and AGC. Progression for

ASCUS group to CIN I, II, III or cervical carcinoma were 30.4%. For LGSIL group; no progressive colposcopy result was determined.

Conclusion: It is inevitable to perform colposcopy in the presence of glandular cell and high-grade cervical cytology abnormalities. However, many low grade premalignant cervical lesions will never progress to malignancy or even may regress over the time. So; the decision of colposcopy for low grade premalignant cervical lesions must be made according the patient compliance to avoid unnecessary invasive procedures.

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Keywords: Colposcopy, cervical intraepithelial neoplasia, cervicovaginal smear

[PP-154]

Which screening test is most reliable for young women in cervical cancer screening?

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Objective: Cervical cancer is the second most common malignancy affecting women in worldwide. Cervical cancer screening is still at the centre of prevention and has a crucial role to decrease morbidity and mortality. Nowadays testing for oncogenic subtypes of human papillomavirus (HPV) alone or with cytology has been introduced as an alternative to cytology screening alone but screening method for young women is still controversial. Here, we reported a case of a young women with no repeated abnormal cervical cytology but HPV screening test positivity and cervical intraepithelial neoplasia (CIN) III in colposcopic biopsy.

Case: A 18-year-old, nulligravid women who stated that she had been healthy with no prior hospital admissions and no personal or family history of malignancy was admitted to our gynecology outpatient clinic for routine cervical cancer screening. Gynecologic examination and ultrasonography revealed no pathologic findings. Cervical samples for HPV DNA and cervical cytology were taken from the patient. Cervical cytology result was ASCUS. Repeated cervical cytology was recommended after 3 months. 3 months later; cervical cytology result

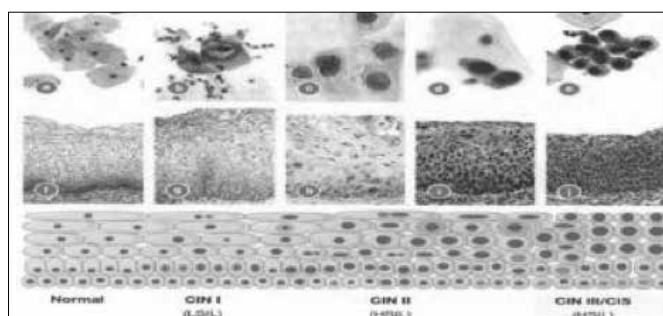


Figure 1. Classification of cervical intraepithelial neoplasia

Table 1. Cervicovaginal cytology and colposcopy results of patients

	ASCUS (n= 56)	LSIL (n=32)	HGSIL (n=14)	AGC (n=1)	ASC-H (n=2)
Chronic cervicitis	39 (69.6%)	21 (65.6%)	2 (14.3%)	1 (100%)	2 (100%)
CIN I	13 (23.2%)	11 (34.4%)	2 (14.3%)	-	-
CIN II	2 (3.6%)	-	3 (21.4%)	-	-
CIN III	1 (1.8%)	-	6 (42.8%)	-	-
Cervical carcinoma	1 (1.8%)	-	1 (7.2%)	-	-

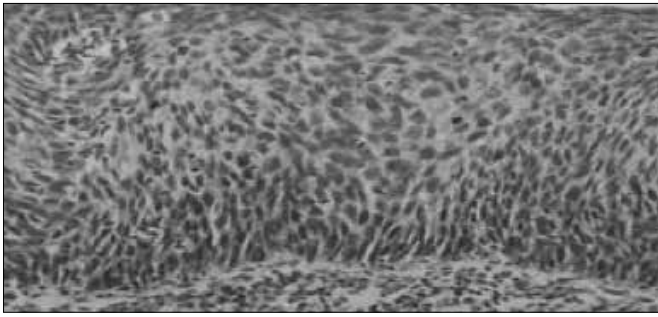


Figure 1. Colposcopic biopsy result (CIN III)

was normal but HPV type 16 was positive. According to HPV positivity, colposcopy was performed and revealed cervical intraepithelial neoplasia III. Then, loop electro surgical excision procedure (LEEP) was applied and the surgical border was negative. Follow-up with six-months for cervical cytology and HPV testing was recommended.

Conclusion: Human papillomavirus (HPV) infections are quite common in young women because of the high rate of sexual activity and reported number of partners. HPV 16 or 18 are strongly associated with CIN III so testing for these types may be a better choice instead of repeating abnormal cervical cytology after a period of time in young women to detect intraepithelial cervical lesions and avoid cervical cancer.

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Keywords: Cervical cancer screening, cervical intraepithelial neoplasia, cervical cancer

[PP-156]

The relationship between POP-Q stage and body mass index in perimenopausal Turkish women

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Objective: Pelvic organ prolapse (POP), which is defined as the descent of female pelvic organs (bladder, uterus, vaginal cuff, small or large bowel) from the normal anatomic location toward or through the vaginal opening, is a common condition worldwide. One of the known risk factor of POP is high body mass index. POP is two or three times more common in patients who are overweight or obese. In this study, we aimed to evaluate the relationship between body mass index and pelvic organ prolapse stage in perimenopausal women.

Material and Methods: A total of 250 perimenopausal women (between the age of 40 and 55) who visited Gaziosmanpaşa Taksim Research and Training Hospital Gynecology Outpatient Clinic for any reason between July 2014 and September 2014 were enrolled to the study. Age, gravida, parity, delivery method, weight, height, history of macrosomic baby, chronic constipation or any disease results in coughing and smoking status were recorded. Body mass index (BMI) were calculated as body weight (kg) divided by the square of height (m²). POP was evaluated according to POP-Q (Pelvic Organ Prolapse-Quantification) staging system. The patient was examined in the dorsal lithotomy position and all 9 measurements except total vaginal length were taken with the patient performing the maximal Valsalva maneuver. The measurements were replaced 3x3 table and POP-Q stage was detected.

Statistical analyses were performed using SPSS version 17.0 (SPSS Inc.; Chicago, IL, USA) for Windows. Continuous, normally distributed variables were expressed as mean±SD while categorical variables were expressed as frequencies and/or percentages. Fisher Exact test and χ^2 -test were used for comparing categorical variables. A p value <0.05 was considered statistically significant.

Results: Mean age of the patients were 48±6.24 years. There was no significant difference between normal weight-obese groups and overweight-obese groups in terms of age, gravida, parity, delivery method, history of macrosomic baby, chronic constipation and smoking status. The distribution of patients according to POP-Q stage and BMI were demonstrated in table 1. In overweight group; stage 0-1 patients were

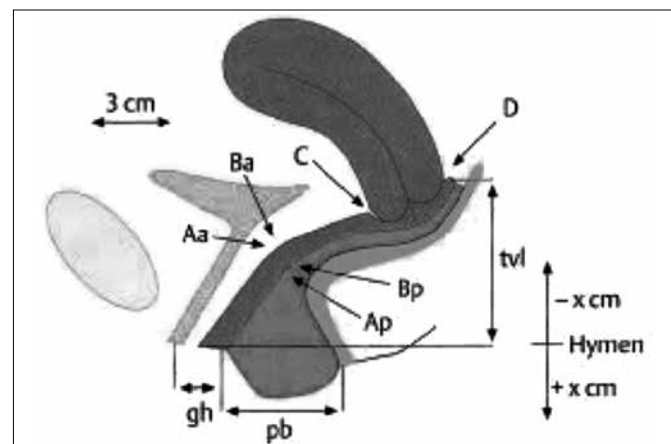


Figure 1. Pelvic organ prolapse – quantification (POP-Q) evaluation

Table 1. The distribution of patients according to BMI and POP-Q stage

	BMI 18.5-25 (normal)	BMI ≥25 (overweight)	BMI ≥30 (obese)
POP-Q Stage 0-1	54 (31.6%)	97 (56.7%)	20 (11.7%)
POP-Q Stage ≥2	17 (21.5%)	23 (29.1%)	39 (49.4%)

statistically significantly higher than stage ≥ 2 patients ($p < 0.05$). On the contrary, in obese group; stage ≥ 2 patients were statistically significantly common than stage 0-1 patients ($p < 0.001$).

Conclusion: High body mass index is still an important risk factor for POP. In addition to this; the higher body mass index the advance stage of POP; because of this reason, to advice losing weight can avoid surgical treatment and the patients can conservatively be treated.

Keywords: Pelvic organ prolapse, body mass index, pelvic organ prolapse – quantification score

[PP-157]

Prenatal diagnosis of a case with diastematomyelia

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Diastematomyelia is a rare abnormality of the spinal canal characterized by a split spinal cord with or without a bony or fibrous septum. The abnormality most commonly occurs between the T9 and S1 vertebral bodies and is rare within the cervical region. Patients may be asymptomatic at birth, but throughout life can develop bowel and bladder dysfunction, motor and sensory difficulties, and progressive pain.

Diastematomyelia has been associated with other neural tube defects, spinal dysraphisms and scoliosis. While patients are often initially asymptomatic, they may present due to visceral malformations, myelomeningoceles, lipomas, Chiari malformations, tethered spinal cords, and other vertebral anomalies. Skin abnormalities such as hypertrichosis are also common.

Spine radiographs may be the first imaging modality to identify an abnormality in patients with diastematomyelia. In these cases, the radiograph may show widening of the spinal canal, a bony ridge at midline, scoliosis and other vertebral anomalies. Currently, CT or MRI is used to confirm the diagnosis. CT scans can show a bony septum and separation of the cord. MRI shows the cord separation and dural sacs in greater detail but may not be as beneficial as CT for the bony abnormalities. Prenatal or neonatal ultrasound has been used to identify the split cord as well as the echogenic formation which can indicate a bony spur.

Here, we report a case of isolated diastematomyelia diagnosed antenatal with ultrasonography and fetal magnetic resonance imaging (MRI) and confirmed by X-ray and autopsy examination.

Case: A 34-year-old woman with second pregnancy at 22 weeks' gestation age had referred to our clinic with undiagnosed spinal lesion. Ultrasonographic evaluation revealed a singleton fetus with fetal biometry consistent with gestational age. Examination of the fetal spine revealed a localized widening of the lumbosacral vertebrae with a hyperechogenic focus. No other structural anomalies were detected in USG. In this case, due to limitation of ultrasonographic evaluation of fetal spine, we also performed a fetal MRI. MRI showed a spur in the spinal canal, which divided the spine into two in the lumbar area. The parents were counseled about the prognosis of diastematomyelia because of neurologic problems in the early childhood period and need for a complex neurosurgery. Because they decided to terminate



Figure 1. MR image

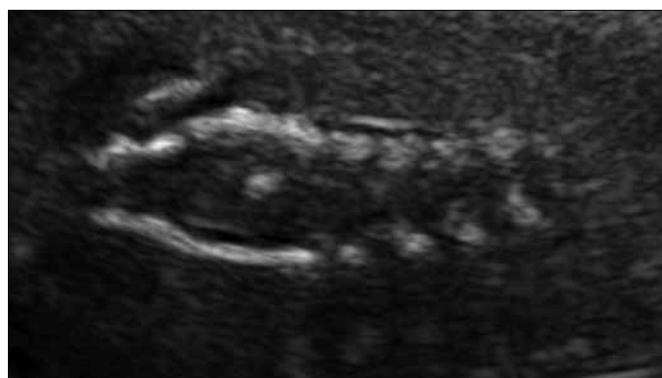


Figure 1. USG image

the pregnancy. In postpartum examination of the fetus, the skin was intact in the lumbosacral area. Anteroposterior X-ray examination of vertebrae revealed local widening of lumbar vertebrae. In complete autopsy in the lumbosacral area was present a bony spur which divided the spinal cord into two.

Keywords: Diastematomyelia, spinal cord, fetal magnetic resonance imaging, prenatal diagnosis

[PP-158]

Comparison of toxoplasma and rubella infection seropositivity in pregnant with different regions of Ankara

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Table 1. Comparison of Toxoplasma and Rubella infection seropositivity rates among two regions

	Urban Region (%) (Koru Ankara Hospital)	Suburban Region (%) (Koru Sincan Hospital)	p
Toxoplasma Ig G +	162/1964 (8.24)	228/987 (23.1)	<0.001
Toxoplasma Ig M +	7/2266 (0.3)	12/1326 (0.9)	<0.05
Rubella Ig G +	1429/1521 (93.95)	1151/1173 (98.12)	<0.001
Rubella Ig M +	8/1853 (0.43)	10/1434 (0.69)	0.34

Objective: To compare Toxoplasma and Rubella infection seropositivity incidence among pregnant living urban and suburban region and to develop new screening strategies.

Material and Methods: The records of all pregnant women admitted to Koru Hospitals between 2012-2015 were retrospectively analyzed. Seropositivity of Toxoplasma and Rubella infections were compared according to the living spaces of pregnant. Koru Sincan Hospital is located in the suburban region meanwhile Koru Ankara Hospital is located in the center of a city.

Results: The seropositivity rates in Koru Ankara and Koru Sincan Hospitals were demonstrated in table. Toxoplasma IgM: 0.3% (7/2266) vs 0.9% (12/1326), respectively ($p<0.001$); Toxoplasma IgG: 8.24% (162/1964) vs 23.1% (228/987), respectively ($p<0.001$); Rubella IgM: 0.43% (8/1853) vs 0.69% (10/1434), respectively ($p=0.34$); Rubella IgG: 93.95% (1429/1521) vs 98.12% (1151/1173), respectively ($p<0.001$). Toxoplasma IgM, Ig G, Rubella Ig G seropositivity rates were significant lower in Koru Sincan Hospital as compared to Koru Sincan Hospital ($p<0.05$, $p<0.001$, $p<0.001$, respectively).

Conclusion: Although the Rubella IgG seropositivity incidence is higher in suburban pregnant, screening for Rubella during pregnancy is considered unnecessary. However we can still screen for Toxoplasma IgM especially in pregnant living in suburban region due to higher seropositivity rates.

Keywords: Pregnancy, seropositivity, rubella, toxoplasma

[PP-159]

Mature cystic teratoma of the ovary coexisting with tubal ectopic pregnancy: a case report

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Although mature cystic teratoma (dermoid cyst) of the ovary and ectopic pregnancy are common gynecologic disorders in women of reproductive age, the coexistence of these two pathologies is an unusual case. We present a 26-year-old nulligravid woman with a history of pelvic pain and minimal vaginal bleeding. Detailed gynecologic examination and imaging studies revealed a simultaneous coexistence of mature cystic teratoma and ectopic tubal pregnancy in the same adnexa. She had undergone laparoscopic surgery. In the exploration, unruptured left tubal pregnancy 2x2 cm in the ampullary region and ip-

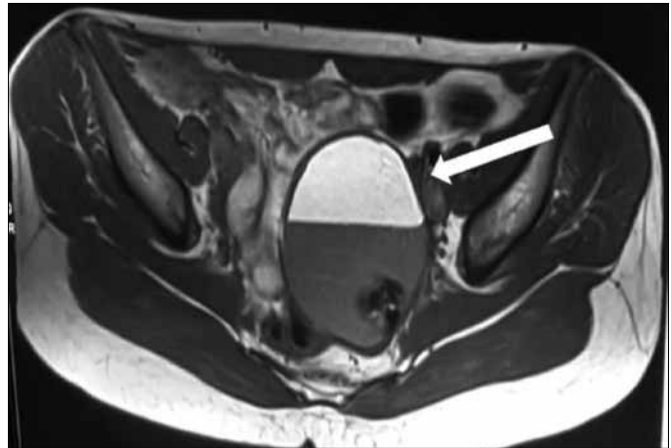


Figure 1. Axial T1-weighted image MRI demonstrates a pelvic cystic structure containing fat (indicated by arrow)

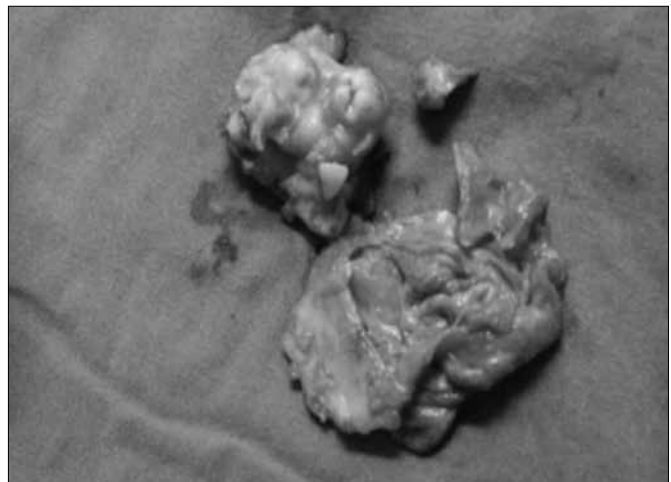


Figure 2. Dermoid cyst removed by laparoscopy

silateral ovarian mature cystic teratoma measuring 9x7 cm were found. Salpingostomy and total cyst excision were performed. Pathological examination confirmed the diagnosis of ovarian dermoid cyst and ectopic pregnancy. Postoperative recovery was uncomplicated. The present report demonstrates the importance of considering the possibility of coexistence of different gynecologic pathologies in the same patient and clinical importance of an accurate diagnostic evaluation.

Keywords: Dermoid cyst, ectopic pregnancy, laparoscopy, ovary

[PP-160]

Is there any role of prolidase enzyme activity in the etiology of preeclampsia?

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Objective: To evaluate a relationship between preeclampsia and prolidase enzyme activity.

Material and Methods: Aprospective cohort study of 41 pregnant women diagnosed with preeclampsia and 31 healthy pregnant women as control group, was selected at Harran University Hospital Department of Obstetrics and Gynecology. The prolidase enzyme activity was analysed in maternal and umbilical cord plasma, amniotic fluid and plasental and umbilical cord tissues by Chinard method in addition to maternal serum levels of LDH, SGPT, SGOT.

Results: A significant relationship was found between plasma prolidase activity (635+-83 U/L) ($p=0.007$), umbilical cord plasma prolidase activity (610+-90 U/L) ($p=0.013$), amniotic fluid prolidase activity (558+-100 U/L) ($p=0.001$), umbilical cord tissue prolidase activity (4248+-1675 U/gr Protein) ($p=0.013$) and plasental tissue prolidase activity (2116+- 601 U/gr Protein) ($p=0.001$) in preeclamptic group when compared to healthy pregnant women.

Conclusion: Our results showed the association between preeclampsia and prolidase enzyme activity supporting the effect of collagen turnover in the ethiopathogenesis of preeclampsia. There is a strong correlation between prolidase enzyme activity and preeclampsia. Prolidase enzyme activity may play a role in preeclampsia.

Keywords: Pregnancy, preeclampsia, tissue and plasma prolidase enzyme activity, endothelial dysfunction

[PP-161]

Balloon tamponade application in treatment of postpartum hemorrhage (Bakri balloon): Our 3-years case series (50 cases)

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Objective: Postpartum hemorrhage is the most common cause of maternal death. The aim of this study was to show the effectiveness, safety and practicability of Bakri balloon for conservative treatment of postpartum hemorrhage at our clinical practices.

Material and Methods: This study included 50 patients who were treated for postpartum hemorrhage in Erzurum Nenehatun Maternity Hospital between 2013, January – 2016, March. Bakri balloon was placed to patients who do not respond to pharmacological therapy and uterine massage. The mean volume of uterine bleed-

ing before and after placing Bakri balloon, the hemoglobin drop-off value, balloon staying time, blood replacement amount, the interval time between the delivery and applying Bakri balloon were evaluated.

Results: Bakri balloons were placed via cesarean section incision in 19 patients and via vagina in 31 patients. The average indwelling duration of Bakri balloon was 18 hours. 4 cases were referred to a tertiary center because of failing to provide hemostasis and it was learned that one of them underwent to hysterectomy. In our center, two of all cases were performed hysterectomy and two cases were performed hypogastric arter ligation. Placental invasion abnormalities were observed in five patients. The mean amount of erythrocyte suspension replacement was 3 units and fresh frozen plasma 2 units for each patient. The successful hemostasis rate of intrauterine Bakri balloon tamponade was 88% for all cases.

Conclusion: It was argued that insertion of Bakri balloon is an effective, practice method for providing hemostasis in postpartum hemorrhage and reducing the rate of operation and complications.

Keywords: Postpartum hemorrhage, Bakri balloon

[PP-162]

Comparison between anterior colporrhaphy with Kelly's plication and transobturator tape approaches in the treatment of female stress urinary incontinence: A 10-year follow-up study

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Objective: Urinary incontinence, the most common type of which is stress urinary incontinence, is a severe health problem that affects physical and psychological status of women. Many surgical approaches are available for the treatment of stress incontinence. The aim of the study is to compare colporrhaphy anterior with Kelly's plication with transobturator tape approach regarding the long-term effectiveness and complications.

Material and Methods: A total of 249 patients who underwent anterior colporrhaphy with Kelly's plication (147 patients) and transobturator tape (102 patients) procedure for stress incontinence between 2005 and 2015 were enrolled to the study. Age, parity, delivery method, menopausal status, hormone replacement therapy, weight, height, urinary incontinence period, previous urogynecologic surgery, op-

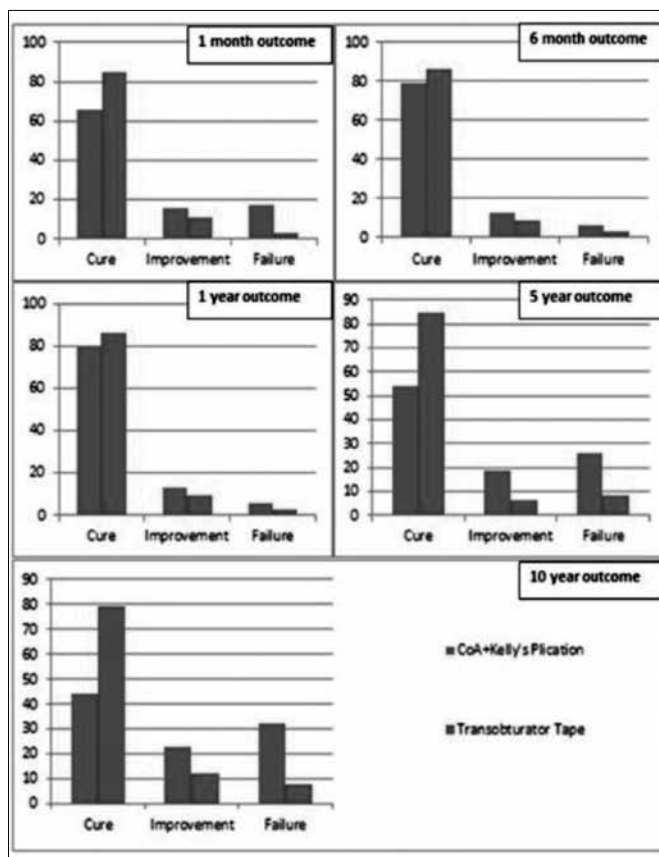


Figure 1. Outcomes of surgical procedures

eration time, duration of catheterization, duration of hospitalization, complications and success rates at 1 month, 6 month, 1 year, 5 year and 10 year were recorded.

Results: Operation time, duration of catheterization and hospitalization were significantly shorter in transobturator tape group. At 1 and 6 month, there was no significant difference among two groups according to cure and failure rates. At 1 year, 5 year and 10 year the cure rate was significantly high and the failure rate was significantly low in transobturator tape group than colporrhaphy anterior with Kelly's plication group.

Groin pain and vaginal perforation were significantly common in transobturator tape group. No complication was seen in 113 patients (76.9%) in anterior colporrhaphy with Kelly's plication group and in 79 patients (77.5%) in transobturator tape group. Bladder injury and wound infection were not recorded in transobturator tape group.

Conclusion: Our study results demonstrate that anterior colporrhaphy with Kelly's plication and transobturator tape are equally effective in short term but both showed decreased cure rates in long term. The reduction in cure rate of transobturator tape group was less than anterior colporrhaphy with Kelly's plication group. We concluded that anterior colporrhaphy with Kelly's Plication could be a good option to repair pelviperineal anatomy while treating stress urinary incontinence and transobturator tape procedure is an effective and minimally invasive method both in short and long term.

Keywords: Stress urinary incontinence, colporrhaphy anterior with Kelly's plication, transobturator tape

[PP-163]

An unusual case of eclampsia at 21 weeks of gestation and risk factors

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Background: Preeclampsia is a leading cause of the maternal and perinatal morbidity and mortality. Eclampsia is the severe form of preeclampsia and characterized by convulsions in patients with preeclampsia findings. The estimated preeclampsia and eclampsia rates were 4,6% and 1% in the world. Eclampsia occurs commonly last trimester of pregnancy and may occur at antepartum, intrapartum and postpartum period. We presented a case with eclampsia occurred at 21 weeks of gestation, much earlier than expected weeks. The aim of this report was to remind the clinicians that severe disease may be occurred at early weeks of gestation in patients with multiple risk factors for preeclampsia.

Case Report: Thirty five –year-old woman (gravidity 11, abortus 9, and parity 1) referred to the emergency service at 21 weeks of gestation with the complaints of unconsciousness and generalized tonic-clonic seizure. She had history of recurrent pregnancy loss (a total of 9 abortus at 6, 6, 12, 16, 16, 19, 19, 21 and 21 weeks of gestation), chronic hypertension, and thrombophilia. Despite the use of antihypertensive drugs, unregulated chronic hypertension were present in her all pregnancies. She had history of preterm delivery with cesarean section due to severe preeclampsia at 26 weeks of gestation. She was using metildopa, low molecular weight heparin and acetylsalicylic acid since the first trimester of the current pregnancy. Her blood pressure was 170/100 mmHg, fetal biometry was consisted with 21 weeks. In physical examination, confusion, periorbital ecchymosis, and pretibial edema was observed. In her laboratory findings, Hgb was 14 gr/dL, thrombocyte was 368,000 cell/mm³, ALT was 21 IU/L, AST was 26 IU/L, creatinine was 0.9 mg/dL and there was 3+ proteinuria. The woman was administered 2 gr/h magnesium sulphate. Blood pressure was regulated with intravenous hydralazine, and pregnancy was terminated by hysterotomy due to the eclampsia indication. Fetal weight was 300 gr. After the operation, patient was followed in the intensive care unit for two days. There was no pathology in her cranial CT. No further treatment was required except regulating blood pressure. The patient was discharged with oral amlodipine treatment.

Discussion: The presented case was one of the few cases with eclampsia at <22 weeks of gestation in the literature, and had many risk factors associated with preeclampsia. She was thirty- five years old and had history of preeclampsia in previous pregnancy, chronic hypertension, recurrent pregnancy loss, and thrombophilia. Preeclampsia risk increases with age. Superimposed preeclampsia rate is 40% in women with chronic hypertension. Recurrence risk in subsequent pregnancy was found 32% in patients with history of severe preeclampsia at second trimester. Patients with the history of three or more abortion have increased risk of preeclampsia and the association was reported between the acquired thrombophilia and preeclampsia and recurrent pregnancy loss. In conclusion, clinicians should keep in mind that the presence of many risk factors together may lead to occurrence of severe disease at the early weeks of gestation, and should inform patients about the adverse maternal and perinatal outcomes of severe preeclampsia.

Keywords: Chronic hypertension, eclampsia, preeclampsia, recurrent pregnancy loss, thrombophilia

[PP-164]

Robotic assisted laparoscopic myomectomy with da Vinci Si and Da Vinci Xi system: A Comparison of Perioperative Outcomes

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Objective: To compare the early surgical outcomes of robotic assisted laparoscopic myomectomy (RLM) between the da Vinci SiR system (Intuitive Surgical, Inc.; Sunnyvale, CA) and the RLM with da Vinci XiR platform.

Material and Methods: Records of Patients underwent RLM via da VinciR Systems from January 2015 and January 2016 by the same senior surgeon were identified from Acibadem Maslak Hospital patient records. Cases having myomas larger than 10 cm, smaller than 5 cm and who had prior surgery were excluded. Three robotic arms and a smoke evacuator (AirsealR SurgiQuest, Inc.; CT, USA) were used for all cases. An assistant trocar were placed and diluted vasopressin was applied into the myomas in all cases. Data of 20 patients (9 patients in Si group and 11 patients in Xi group) were evaluated for set up time, total operation time, estimated blood loss and length of hospital stay. Set up time was defined as the time from first skin incision to the end of the docking of robotic arms. Operation time was defined as the time from intubation to the end of extubation of the patient.

Bleeding was calculated from the difference between irrigation and suction fluid volumes.

In this case control study, descriptive data were presented by ratio, mean and median. Mann-Whitney U test was used for comparison of inter-group variables. A value of 0.05 at 95% CI was accepted as significant.

Results: Mean age (38.1±5.8 vs. 35±5 years; p=0.2), BMI (23.1±2.5 vs. 22.8±1.9 kg/m²; p=0.6) and mean diameter of the myoma (5.9±1.4 vs. 7.1±2.3 cm; p=0.3) of the Si and Xi groups were comparable. Mean set up time of Si group was 36.1±15 min. and 28.18±7.50 min. for the Xi group (p=0.331). While mean operation time of Si group was 171±41 min. it was 168±39 min. for Xi group (p=0.552). Mean estimated blood loss was 122±75 mL for the Si group and 200±210 mL for the Xi group (p=0.370). The difference in the length of hospital stay for RLM is not statistically significant between da Vinci SiR (1.67±2 days) and da Vinci XiR (1.45±1 days) platform (p=0.456). None of the cases were converted to laparotomy and none of the cases had significant perioperative complications.

Conclusion: Robotic assisted laparoscopy has brought a significant development to minimally invasive gynecologic procedures within improving wristed instrumentation and 3-D vision (1). Myomectomy is one of the most feasible gynecologic procedures having done by robotic assisted surgery (2). New da Vinci XiR system has advantages

Table 1.

	Da Vinci Si	Da Vinci Xi	p
Age	38.11±5.75	35±5.04	0.152
BMI (kg/m ²)*	23.11±2.47	22.81±1.88	0.603
Myoma Size (cm)	5.89±1.36	7.09±2.34	0.331
Set up Time (min)	36.11±14.95	28.18±7.50	0.331
Op. Time (min)**	171±41	168±39	0.552
Blood Loss (mL)	122±75	200±210	0.370
Hospital Stay (day)	1.67±2	1.45±1	0.456

of boom feature and easier moving arms compared to da Vinci SiR platform. We have conducted our analysis in a small sample, however the study provides an initial report to compare two platforms for robotic assisted myomectomy. As a consequence there is no significant difference in the selected outcomes between the XiR and SiR systems. There is need for further research to compare the outcomes of two systems

Keywords: da Vinci surgery, robotic assisted laparoscopic myomectomy, robotic myomectomy, si system, xi system

[PP-165]

Reproductive outcome after hysteroscopic septum resection in infertile women

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Objective: To determine the conception and term pregnancy rates following the hysteroscopic resection of the primary and secondary infertile women with a septate uterus.

Material and Methods: In 36 patients admitted to our department, from September 2009 to March 2014, with primary and secondary infertility (previous abortions, premature deliveries), uterine septum was detected via HSG. Primary and secondary infertility categories consisted of 15 and 21 patients, respectively. Following the exclusion of all other factors leading to the infertility, hysteroscopic septum resection and concomitantly laparoscopy were performed in all cases. A retrospective study investigating reproductive outcomes following septum resection was conducted. Reproductive outcomes were compared between pregnancies prior to and after the septum resection.

Results: The mean operating time was 27.5±7.0 mn. In all cases, post-operative HSG revealed no remnant tissue. After septum resection, asherman syndrome was improved in 4 (11.1%) patients and 3 (8.3%) patients was required cervical cerclage. 25 patients have conceived (69.4%) following the resection. Of these 25 cases, term pregnancy was achieved in 19 patients (52.8%). In primary and secondary infertile groups, the term pregnancy rate was found to be 53.3% and 54.2%, respectively. In secondary infertile group, the miscarriage rate for those who had experienced 2 or more previous miscarriages decreased from 61.9% to 4.8%. The term delivery rate also rose from 19% to 61.9%.

Conclusion: Hysteroscopic septum resection promotes the fertility either primary or secondary. Thus, any case with a history of recurrent pregnancy was stages and infertility necessitates the investigation for the presence of the uterine septum. Hysteroscopic surgical approaches should be preferred in regard to the short duration of the operation and the hospital stay as well as the increased chance for the vaginal delivery in the next pregnancies following the operation.

Keywords: Mullerian anomaly, uterine septum, operative hysteroscopy

[PP-166]

Evaluation of surgical treatment in cases with tubaovarian abscess

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Objective: The aim of this study was to investigate the clinical and laboratory findings, surgical methods and complications of patients with tubaovarian abscess and underwent surgery.

Material and Methods: Retrospective analysis of patients with tubaovarian abscesses and treated with surgical methods in Mustafa Kemal University, Obstetric and Gynecology Department between January 2014- March 2016 was performed. The clinical and laboratory characteristics, surgical methods, complications and antibiotic regimen of subjects were recorded.

Results: The mean age of 19 subjects included into the study was 32.7. The average diameter of tubaovarian abscesses before the surgery was 8.46 cm according to the ultrasound and computed tomography results and the mean length of stay in hospital was 8.5 day. The mean serum CRP concentration was 147 mg/L and was found higher than 5 in 89.5% (17) of the subjects. The patients was underwent surgery as abscess drainage in 47.7% (9), salpingectomy in 15.8% (3), total abdominal hysterectomy and bilateral salpingoophorectomy in 15.8% (3) and unilateral salpingoophorectomy in 21.4% (4) of cases. Abscess recurrency and DIC were observed in 1 patient later on she was died. Bowel injury has occurred in two patients.

Conclusion: The surgical treatment modality of tubaovarian abscess was dependent on fertility desire and age of patient and also skill and experience of the surgeon.

Keywords: Tubaovarian abscess, surgery, complication, antibiotic

[PP-167]

Determination of sperm DNA damage in male patients with advanced varicocele

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Objective: Varicoceles are widens of the veins in testicles which causes one of the most common reasons of male infertility. Varicocele is determined approximately one third of men (35%) presenting infertility. 85% of varicocele is in the left testicle and 15% is bilateral. Protecting the integrity of the genetic structure of the sperm is important for normal fertilization and healthy embryo development. Increasing temperature in the testicle due to varicocele affects sperm development and also sperm DNA integrity. Investigation of sperm DNA quality and structure is so important in infertile men with normal conventional sperm analysis. The aim of this study is to show the state of sperm DNA damage in men with advanced varicocele.

Material and Methods: In our study, men with Grade III varicocele (n=20) and men without varicocele with normospermia (n=20) for control were included. Halosperm test was used to detect the sperm DNA damage. After semen analysis, 25 µl semen were taken and placed in agarose gel matrix and then acid solution was added for denaturation. Then, lysis buffer was added to the solution for removing proteins and sperm membrane. Sperm with normal DNA created a wide halo while sperm with damaged DNA gave very little halo or showed no halo. Normal value as DNA fragmentation <15%, intermediate values as DNA fragmentation 15-30%, and the risk groups as DNA fragmentation >30% were considered.

Results: When compared the semen analysis results between men with advanced varicocele and men without varicocele, sperm concentration (27.35x106 and 45.66x106), motility (65.71% and 72.16%), total progressive motil sperm count (47.42x106 and 92.83x106) and morphology (1.43% and 2.66%) were found respectively. Sperm DNA fragmentation was determined higher in men with advanced varicocele (29.2%) compared to men with no varicocele (7.6%).

Conclusion: Sperm DNA fragmentation was determined significantly higher in men with advanced varicocele. Varicocele surgery may be recommended to these patients.

Keywords: Advanced varicocele, infertile men, sperm DNA fragmentation

[PP-168]

Germinal vesicle (GV) oocytes to term pregnancy

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Objective: In this discussion immature oocyte of a patient with poor ovarian reserve was followed up to term pregnancy.

Material and Methods: Patient is 41 years old, two previous operation, one c/s operation and the other is left tubal ectopic pregnancy. After ectopic operation patient wait three year for another pregnancy but she failed. Then after 3 consecutive unsuccessful ivf trial, the couple decided a to give themselves a last chance. After transvaginal examination two antral follicle (AF) was seen and the same day anti-mullerian hormone (AMH) level is 0.2 ng/mL. The couple is detailedly informed about very small success of pregnancy chance because of very low ovarian reserve. The treatment started on second day of menstrual period with letrozole (Femara) 50 mg twice daily for five day. On sev-

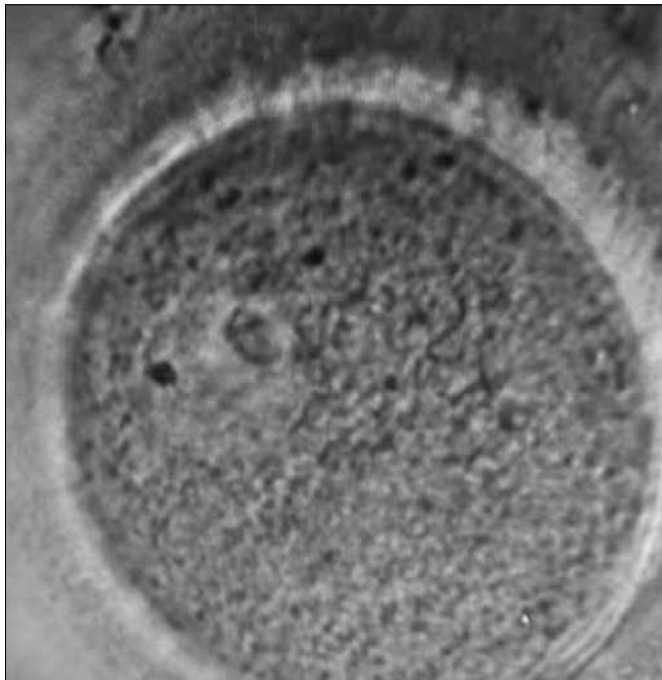


Figure 1. Germinal vesicle

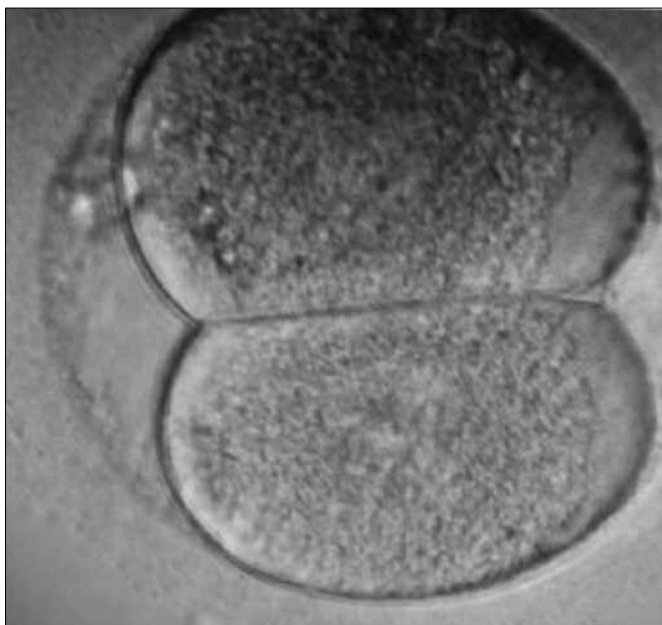


Figure 2. Fertilize embryo

enth day a transvaginal usg exam performed 11 and 8 mm two follicle detected and 225 unit of Hmg (Merionel) and one day later antagonist 0.25 mg (Ganirelix) was added to treatment. When leading follicle is 18 mm hCG triggering made and after 36 hours oocytes were aspirated with a double lumen needle (COOK) under general anesthesia one oocyte is empty zona and the other is germinal vesicle (GV). GV oocyte was incubated in sage 1-step medium for 24 hours, after polar body liberation intra-cytoplasmic sperm injection applied (late-ICSI). One day later fertilization was observed and in the afternoon in two cell cleavage stage the embryo transferred to the uterine cavity. Intramuscular progesterone 50 mg daily, lmw 0.4 mg, and estrogen support added to the treatment. Twelve day later serum hcg level was detected 94 mIU/mL and two days later the level was 182 mIU/mL, ten days later the patient asked for usg examination, 8 mm regular sac observed and two weeks later fetal cardiac activity (fka) observed. The later examinations were made in a hospital near to patient home, at six week estrogen, at eighth week progesterone stopped but lmw continued. At 33 week of gestation because of premature membrane rupture the pregnancy terminated, 1780 gr healthy male baby was born. He is nearly 8 month old and has a normal physical and neurologic development.

Results: Stimulated oocytes which are immature in extremely low ovarian reserve patients must be followed at least 24 hours for a very small chance of pregnancy probability.

Keywords: Germinal vesicle, poor ovarian reserve, very low ovarian reserve

[PP-170]

Impaired implantation and endometrial receptivity after ovarian stimulation for in vitro fertilization; a trial comparing fresh and frozen-thawed embryo transfers in normal responders

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Objective: To compare the reproductive outcomes of fresh embryo transfers (ET) with frozen embryo transfers (FET) in normal responder patients to assess differences in endometrial receptivity.

Design: Retrospective study

Setting: Private fertility clinic

Material and Methods: In this pilot study, 392 women underwent antagonist protocol controlled ovarian stimulation for intracytoplasmic sperm injection (ICSI) and extended embryo culture IVF treatment. All women had 10-15 oocytes retrieved (normal responders); of these, 240 (group A) had fresh day 5 blastocyst ET and 152 women (group B) had day 5 freeze-all and blastocyst FET. Blastocyst vitrification was performed using the Cryotop method and technology and FET was performed in artificial FET cycles. Student's t test and Chi-square test were used for statistical comparisons.

Table 1. The patient characteristics and reproductive outcomes of normal responder patients

Groups	Group A (Fresh Day 5 ET)	Group B (Frozen-thawed day 5 ET)	p
Number appropriate	240	152	Non
Age	32.8±5.05	33.4±5.2	0.129
Infertility duration (years)	5.2±4.6	5.6±4.3	0.195
BMI	26.1±4	25.9±5.5	0.339
Blastocyst number	4.27±1.98	3.98±1.81	0.073
Mean embryo transfer	1.86±0.35	1.84±0.48	0.317
Pregnancy rates (HCG+) %	64.2	75.7	0.023
Clinical pregnancy rates (FKA+)	50.8	60.5	0.076
Implantation rates	39.5	46.8	0.035

Results: The patient characteristics were non-significantly different between the two groups. The pregnancy rates per ET were higher in group B than group A (75.7% vs 64.2%, $p=0.023$). The clinical pregnancy rates per ET were also higher in group B than group A (60.5% vs 50.8%, $p=0.076$), but not statistically significant. The implantation rates per ET were also higher in group B than group A (46.8% vs 39.5%, $p=0.035$). No FET cycles were cancelled, due to blastocyst degeneration following blastocyst warming.

Conclusion: The pregnancy rates and the implantation rates were significantly greater in the freeze-all with FET group. There is also a tendency of higher clinical pregnancy rates in the freeze-all with FET group. These results strongly suggest that blastocysts of similar quality have increased implantation in FET, suggesting that endometrial receptivity may be impaired in fresh ET. Importantly, current vitrification technology for blastocyst cryopreservation poses a very low risk for the loss of blastocysts and blastocyst competence.

Keywords: Implantation, cryopreservation, blastocyst transfer, endometrial receptivity

[PP-171]

Recurrent fetal agenesis of corpus callosum: A case report

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Background: Agenesis of the corpus callosum (ACC) is defined as complete or partial absence of the corpus callosum. It is a heterogeneous malformation, with many etiologies. The overall rate of chromosomal abnormality to be 17.8% that includes both isolated and complex ACC. Chromosomal microarray testing (CGH) increase of diagnostic yield up to 5.2% for genomic imbalance by array CGH

more than conventional karyotyping when the indication of prenatal diagnosis was a structural malformation on ultrasound. The recurrence risk is depends on the underlying cause. Isolated ACC is usually sporadic but the recurrence risk is probably 2 to 3% in familial cases. Here we want to present a recurrent ACC with normal conventional karyotyping.

Case: A 29-year-old, gravida 2 Parity 1 live 0, referred to our antenatal unit at 20 weeks with suspicion of fetal cranial abnormality. She had a history of isolated ACC at her first pregnancy with normal karyotype (46, XX) that was terminated at 23 weeks. Parents were nonconsanguineous couple with unremarkable medical history. Her first trimester screening test was normal. Our ultrasound examination revealed that mild bilateral ventriculomegaly. (Figure 1) The cavum septum pellucidum and corpus callosum could not be identified. (Figure 2) Biometry was consistent with gestational age. There were no associated fetal abnormalities. The serological tests were normal (toxoplasmosis, rubella, CMV, herpes). Fetal conventional karyotype was normal (46, XX). Chromosomal microarray testing (CGH) and fetal MRI of the brain were offered to the patient and she refused this procedure. After detailed counseling they opted to terminate of her pregnancy at 22 weeks.

Conclusion: The recurrence risk of ACC is depends on the underlying cause. Therefore, array CGH should be especially recommended with conventional karyotyping for pregnant woman who has a fetus with structural malformations such as isolated ACC for prediction of the recurrence risk for subsequent pregnancies and prenatal diagnosis.

Keywords: Bilateral ventriculomegaly, corpus callosum, prenatal diagnosis, septum pellucidum



Figure 1. Transverse plane showing dilated lateral cerebral ventricles

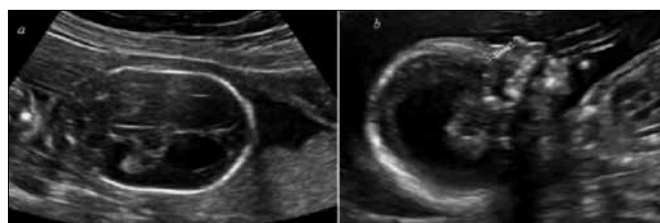


Figure 2. Transverse plane showing absent cavum septum pellucidum (a), sagittal plane showing isolated complete corpus callosum agenesis (b)

[PP-172]

A temporary hydrops is a clue for the prenatal diagnosis of down syndrome in dizygotic twin pregnancy

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Background: Fetal hydrops is a consequence of various fetal diseases including down syndrome with an incidence of around 1/2500 to 3000 pregnancies. The co-occurrence of down syndrome and isolated fetal hydrops fetalis is rare.

Case: A 33-year-old multigravida was referred for detailed sonography at mid trimester of pregnancy. Male fetus had a mild hydrops (Figure 1) and no additional findings. Female fetus had a normal fetal anatomy. After counseling about related anomalies, amniocentesis was offered to rule out chromosomal abnormalities. The couple opted the procedure and repeated sonography during the procedure revealed the decreasing of the severity of hydrops (Figure 2). Foetal karyotype by amniocentesis demonstrated a 47, XXY abnormal male pattern. Subsequently, we performed fetocid, using ultrasound-guided intracardiac KCL injection towards the request from the couple. During follow-up the remained pregnancy, the rupture of amniotic membrane of the ex fetus was occurred. Ampicillin 1 gr three times per a day was given during 10 days. Once the physical examination and laboratory were normal, the pregnant was charged. We followed up her biweekly. Woman delivered vaginally at 37 weeks' gestation. The birthweight was 2740 g and Apgar scores were 7 and 9 at 1 and 5 minutes, respectively. The female fetus was healthy with no chromosomal abnormality.

Conclusion: Down syndrome should be kept in mind in the differential of the diagnosis of fetal hydrops even though it seems temporary. Invasive procedures should be offered to rule out down syndrome.

Keywords: Fetal hydrops, Down syndrome, prenatal diagnosis



Figure 1. Ultrasound scan showing the moderate hydrops in male fetus



Figure 2. Hydrops was resolved within a week with a notable disproportion in favor of right ventricle

[PP-173]

The rare co-occurrence of congenital diaphragmatic hernia and aortic coarctation

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Background: Fetal congenital diaphragmatic hernia (CDH) is a life-threatening anomaly with an incidence of around 1/2500 live births. CDH may be isolated or associated with malformations (especially cardiovascular abnormalities). Here, we report the prenatal diagnosis of a rare co-occurrence of CDH and left ventricular outflow tract obstruction.

Case: 27-year-old primigravida was referred for evaluation of fluid filled mass in the fetal thorax that was seen on routine second trimester ultrasonography (US) at 21 weeks' gestation. Detailed US of the fetus showed fluid filled stomach and liver herniated to left chest cavity. Fetal hepatic vessels were determined by color Doppler examination to confirm liver herniation (Figure 1a). Moreover, fetal heart was identified in the right chest cavity. A right axis deviation and slightly decreased size of the left ventricle was present in the four-chamber view. Doppler US also showed decreased blood flow through the left ventricle (Figure 1b). In the three vessels and trachea view, the diameter of the aorta was smaller (ra-



Figure 1 a-d. Color Doppler sonography shows hepatic vessels of herniated liver (a), Color Doppler sonography shows decreased blood flow through the left ventricle (b), the three vessels and trachea view shows the narrowed aorta (c), determination of the estimated lung volume by the tracing method (d)

tio, 0.6) compared to the main pulmonary artery (Figure 1c) with Z-score of -2.59 and 0.53, respectively. The O/E LHR of the right lung was less than 25% (Figure 1d), indicating increased risk of subsequent pulmonary hypoplasia. Foetal karyotype by amniocentesis demonstrated a 46, XY normal male pattern. Additional microarray analysis of the amniotic fluid did not detect any genomic imbalance. Subsequently, we offered counselling to consider management options of CDH with LVOT obstruction and explained the risks and benefits of pregnancy continuation. The couple opted for termination of the pregnancy. We performed feticide, using ultrasound-guided intracardiac KCl injection followed by vaginal misoprostol administration.

Conclusion: CDH may be accompanied by chromosomal and non-chromosomal defects, including aortic coarctation, which is a relatively rare association. Genetic tests, foetal echocardiogram, and determination of the estimated foetal lung volume should be the mainstays of prenatal work-up. These will aid for proper counselling and perinatal management.

Keywords: Congenital diaphragmatic hernia, aortic coarctation

[PP-174]

Inutero fetal intracranial hemorrhage: A case report

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Background: Intracranial hemorrhage (ICH) is frequent in the premature neonate, although it's a rare inutero complication (1 in 10,000 pregnancies). The most frequent form in fetus is subependymal/intraventricular hemorrhage. Its prenatal diagnosis by multimodality evaluation including ultrasonography and/or magnetic resonance imaging has been reported. Predisposing factors for inutero ICH include maternal trauma, maternal anticoagulation, twin - twin transfusion, preeclampsia and epileptic seizures, drug abuse (cocaine), intrauterine infection, fetal coagulation disorders, immune thrombocytopenic purpura and alloimmune thrombocytopenia. In many cases however, the cause is not identified. This is a case of inutero fetal intracranial hemorrhage without any available risk factors.

Case: A 30-years-old, gravida 2, parity 1, live1 patient referred to our antenatal unit at 22 weeks of gestation. There was no abnormal



Figure 1. Transverse plane showing absence of cerebral sulci and gyri development and large clot formation



Figure 2. Transverse plane showing shifted coroid plexus'

history or findings in her first pregnancy. Parents were non-consanguineous couple. Maternal past history was negative; she denied use of any medication during pregnancy, including specific questions of use of aspirin like drugs. The course of this pregnancy was uneventful and trauma, seizures, hypertension, diabetes mellitus or any other disease during pregnancy were excluded. Our ultrasonographic examination revealed an alive, singleton pregnancy. There were no cerebral sulci and gyri development, subarachnoid space couldn't be visualized, coroid plexus' were hypoechoic and shifted laterally and intraventricular large cloth formation was detected. Fetal growth was normal and no associated anomalies were detected. Maternal and fetal blood count was normal without thrombocytopenia. There weren't any abnormality on peripheral blood smear. Fetal karyotype was normal (46,XX). Direct coombs test was negative. Serological tests were normal (toxoplasmosis, rubella, CMV). HPA antigen screening offered for excluding fetal/neonatal allo-immune thrombocytopenia (FNAIT). Parents refused this procedure. Parents were counseled and they selected termination of pregnancy. This pregnancy was terminated at 23 weeks.

Conclusion: Intracranial hemorrhage (ICH) is a common complication of premature infants, and may also occur in utero rarely. Cases may occur as a result of in utero fetal trauma. Because uterus and amniotic fluid offer effective protection for fetus, fetal trauma usually occurs only with severe forms of maternal injury. Fetal intracranial bleeding has also been reported with maternal anticoagulation. Warfarin, which is known to cross the placenta, have been associated with fetal warfarin syndrome as well as with fetal bleeding. Immune thrombocytopenic purpura, in rare cases, can produce fetal thrombocytopenia severe enough to cause fetal hemorrhage. Although rare, alloimmune thrombocytopenia is an even more predictable inducer of fetal thrombocytopenia and has been linked to cases of fetal hemorrhage prior to the onset of labor. Despite knowledge of the aforementioned causes, many cases of fetal intracranial bleeding have no identifiable etiology. In our case, we excluded known risk factors and there was no evidence for cause of in utero ICH.

Keywords: Fetal intracranial hemorrhage

[PP-175]

The information level of female health personnel about the next day's pill

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Objective: Unplanned pregnancies cause medical, psychologic or economical problems in reproductive age group. Emergency contraceptive methods are important for preventing these problems especially unprotected sexual relations. Female health personnel is one of the most important informative person in hospitals and family planning centers. Thus, in this study we aimed to evaluate the level of information about next day's pill in female health personnel.

Material and Methods: Sixty two female health personnel from Tepecik Training and Research Hospital was included in this study. Demographic features of the personnel were obtained by face to face conversation between May 2013 and June 2013. Nine questions which has correct or incorrect information based on medical relevance guideline in contraceptive methods prepared by WHO in 2009 were asked and results were evaluated according to the numbers of correct and incorrect answers.

Results: Among all personnel, 83.9% were graduated from university whilst 16% were graduated from high school. According to their areas of expertise, 30.6% were medical doctors, 61.3% were midwives and nurses and 8.1% were other health personnel. Among the participants 11.3% had used emergency contraceptive methods. The distribution of correct and incorrect answers to the questions designed for determining the level of knowledge about next day's pill is shown on the table.

Conclusion: The level of knowledge about next day's pill is found about 70-77% among our health personnel however when compared to the literature it is inefficient for being consultant about emergency contraception. Comprehensive in-service Training panels may help to raise the level of knowledge and reach a certain level for public's needs.

Keywords: Next day's pill, emergency contraception, unplanned pregnancy

[PP-176]

Thyroid hormone levels in hyperprolactinemic infertile women

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Objective: We aimed to determine serum thyroid hormone levels in hyperprolactinemic infertile women.

Material and Methods: Two hundred and fifty infertile women with hyperprolactinemia (Group I) and 250 infertile women with normal prolactin levels (Group II) were included in this retrospective study. Serum thyroid stimulating hormone (TSH), freeT3 (fT3) and free T4 (fT4) values of the patient groups were compared.

Results: TSH levels in the women with hyperprolactinemia were found to be significantly higher than normoprolactinemic women (2.88 uIU/mL vs. 1.97 uIU/mL for Group I and II, respectively, p<0.001). On the other hand, there was no statistically significant difference between the groups in terms of fT3 and fT4 levels.

Conclusion: Subclinical hypothyroidism is more common in hyperprolactinemic infertile women than those women with normoprolactinemic levels.

Table 1. Characteristics of the two groups

	Hyperprolactinemia (n=250)	Control (n=250)	p
Age (years)*	27.75±6.09	27.9±4.75	0.75
PRL (ng/mL)*	39.73±18.88	11.00±4.74	<0.001
TSH (uIU/mL)*	2.88±1.92	1.97±1.29	<0.001
fT ₃ (pg/mL)*	3.16±0.49	3.17±0.33	0.87
fT ₃ (ng/dL)*	0.87±0.18	0.88±0.19	0.82

Keywords: Hyperprolactinemia, infertility, thyroid hormones

[PP-177]

Emergency surgical management of an infertile patient with multiple myomas in Niyala Turkish Training and Research Hospital

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Objective: So far away from homeland in Afrika Niyala Turkish Training and Research hospital which has a limited medical conditions, the patient come with hemorrhagic shock and the way of surgical management discussed.

Material and Methods: The patient is 27 years old, 9 years of married and infertile, she is third wife of her husband who has 9 children from his two other wives. Her last menstrual period is very painful and nearly twenty days of heavy menstrual bleeding. The patient is living in Chad in the middle of Africa, she made 15 hours travel, cross the border of Sudan and came to Niyala Turkish Training and Research Hospital in Niyala State. When the patient is in emergency room her hemoglobin level was 2 gm/dL and hematocrit 7.8%, mildly subconscous, blood pressure is 70/30 mmhg with heavy vaginal bleeding. The abdominal ultrasonography shows multiple myomas filled the whole abdominal part. Because of cervix was closed with myomas, it is not possible to pass cervix and reach the uterine cavity for a therapeutic curettage. A fast decision was given and 6 unit erythrocyte suspension and 6 unit of fresh frozen plasma transferred intravenously to the patient in 24 hours. Also 4 unit of erythrocyte suspension and 4 unit of fresh frozen plasma prepared and patient taken to the operating theatre. In exploration nearly ninety percent of uterus is covered with myomas (Figure 1). Approximately 64 myomas of subserous, intramu-

ral and submucous had been removed from uterus, and the biggest myoma is 16 cm (Figure 2). The fallopian tubes and the ovaries are repositioned.

Six month after the operation patient made a visit to hospital; she had no bleeding and a delay of menstruation, hemoglobin level was 10 gm/dL, hematocrit level was 31% and hCG level was 6324 mIU/mL, during the ultrasound examination a pregnancy of 6 week gestational sac detected

Results: In Africa continent patients generally reach hospitals in a terminal status because of the number of hospital is so few and far away from town centers. The operation was made in very unsuitable conditions but against this the patient get her health and very wanted pregnancy soon.

Keywords: Emergency surgical management, multiple myomas, infertile



Figure 1. 64 myomas



Figure 2. Uterus is covered with myomas

[PP-178]

Primary signet ring cell adenocarcinoma of cervix: A case report

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Introduction: Primary pure or predominantly signet ring cell carcinoma is an extremely rare carcinoma of cervix. It has been defined as a histological subtype of mucinous adenocarcinoma of cervix and associated with unfavorable clinical behavior. To the best of our knowledge, only nineteen primary cases have been reported in literature up to date.

Case: In our case, 30-year-old nulligravid patient was presented with abnormal vaginal bleeding. Gynecologic examination revealed a polypoid 6 cm cervical mass, which appeared to be originated from endocervical canal. The patient referred to our hospital and underwent type 3 hysterectomy, bilateral salpingo-oophorectomy, pelvic and paraaortic lymphadenectomy. Pathology was signet ring cell adenocarcinoma of cervix with three metastatic lymph nodes. After surgery, the patient had platin based chemotherapy. Under chemotherapy, she had recurrent disease only 3 months after surgery.

Discussion: Signet ring cell adenocarcinoma at cervix is extremely rare and it is important to identify if the disease primary originated from cervix or not. In most of cases, signet ring cell carcinoma of cervix is represented as metastasis and usually originated from stomach or gastrointestinal system, less frequently from breast or lungs. The clinical signs, imaging and endoscopy findings are necessary for identify primary site of tumor because the management and prognosis are different from metastatic signet cell carcinoma of cervix.

Conclusion: Since the rarity of the disease, treatment and prognosis is unclear. In the majority of primary cervix signet ring cell carcinoma cases had poor prognosis with resistance to chemo-radiotherapy and short survival time. Therefore, case reports could be helpful for management of patients with primary signet ring cell adenocarcinoma of cervix.

Keywords: Cervix carcinoma, primary, signet cell adenocarcinoma

[PP-179]

What is the faith of the conserved adnexias after hysterectomy?

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Objective: Prophylactic oophorectomy during hysterectomy for benign causes in women under the age of 50 is a controversial issue. The reoperation rate for conserved ovaries after hysterectomy is reported to be approximately 3-5%. In this work, we aimed to examine the indications for surgery and histopathologic features of patients who underwent reoperation for an adnexal pathology after hysterectomy for benign conditions.

Material and Methods: This study evaluated the data of women who were followed up for adnexal pathology after hysterectomy in our

clinic between 2007 and 2013. A total of 137 patients were identified from hospital records and their medical records were reviewed retrospectively. Data obtained and recorded for each patient were demographics and clinical characteristics including the time elapsed between operations, histopathology results, and operative complications.

Results: The mean age of patients at the time of hysterectomy was 42.60 ± 2.76 years. The mean time interval between hysterectomy and detection of adnexal mass was found to be 26.48 ± 39.01 months. A hundred and twenty-seven (91.2%) of the patients were thought to have ovarian cysts and 12 (8.8%) have peritoneal cysts. Mean cyst size was 58.22 ± 23.94 mm. In 71 (51.8%) patients, a second operation was planned for the management of the cysts. The mean time interval between second operation and detection of adnexal mass was calculated as 5.93 ± 4.47 months. It was seen that the mean age of patients at the time of second surgery was 46.45 ± 4.05 years. The route of surgery was laparotomy in 38 (53.5%) patients, laparoscopy in 27 (38%) patients, and transvaginal cyst aspiration in 6 (8.5%). Twenty-one (29.5%) patients were treated with bilateral salpingo-oophorectomy whereas unilateral salpingo-oophorectomy was performed in 21 (29.5%). Intraoperative complication rate was 9.8% (7 patients), and bowel injury (5 patients) was the most common complication which was followed by ureteral injury (2 patients). There were functional cysts in 22 (31%) patients, benign epithelial ovarian tumors in 21 (29.6%) and peritoneal cysts in 12 (16.9%) patients. There was no evidence of malignancy in none of patients. Ten out of 71 patients were followed up again with a diagnosis of adnexal mass. Seven of them underwent their third operation for ovarian cysts. Laparotomy was performed in 5, laparoscopy was performed in 1, and 1 patient was treated with transvaginal cyst aspiration. A definitive surgery was performed in all patients who underwent both laparoscopy and laparotomy.

Conclusion: Ovarian conservation at the time of hysterectomy performed for benign reasons in women is still debated in the current gynecologic practice. Ovarian cysts may lead to anxiety for both patients and doctors, and frequently result in a surgical intervention that can cause complications. Patients undergoing hysterectomy without oophorectomy under the age of 50 should be counseled that they are at risk for adnexal pathology and the potential additional surgery in the future. Furthermore, surgeons should be careful for prevention of intraabdominal complications during operation. If there is no suspicion of malignancy, follow up visits may be preferred to avoid complications of surgery.

Keywords: Hysterectomy, oophorectomy, ovarian cyst, reoperation

[PP-180]

Is adding estradiol (E2) to progesterone for luteal phase support in antagonist protocol stimulated in vitro fertilisation (IVF) cycles beneficial?

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Objective: Searching the effect of estradiol administration for luteal phase support in antagonist protocol in vitro fertilisation cycles.

Material and Methods: Only women who were stimulated according to antagonist protocol were included in the study. The retrospective data of 176 women were analysed. First group consisted of 79 women who had received 4 mg estradiol valerate in addition to 8% progesterone vaginal gel. Second group consisted of 97 women who had received only 8% progesterone vaginal gel.

Results: The statistical analyses showed no significance between group 1 and group two for age, infertility duration, body mass index, basal E2 levels, total antral follicle number, total gonadotropine doses, days of antagonist use, etiological factors, endometrial thickness at basal ultrasound day and at the day hcg administered. Basal FSH level was statistically lower in group 1. (5.96 ± 1.53 vs 6.66 ± 1.69) ($p=0.005$). Retrieved oocyte number, fertilised oocyte number, transferred embryo number, embryo grade and quality did not show statistical difference. Only mature oocyte number was significantly higher (7.33 ± 4.17 vs 6.12 ± 3.64) ($p=0.042$). Considering the success of the treatment among group 1 and group 2; Bhcg positivity (26.58% vs 24.74% $p=0.781$), clinic pregnancy (26.58% vs 20.62% $p=0.352$), vaginal bleeding in a pregnancy (8.68% vs 8.25% $p=0.885$) and abortion rates (6.33% vs 6.19% $p=0.969$) did not show a statistical difference.

Discussion: In stimulated IVF cycles because of the oocyte aspiration granulosa cell number decreases, luteinisation fails and estrogen and progesterone levels decrease in luteal phase. In order to overcome this, progesterone support is mandatory. In this study we evaluated whether adding estradiol can help improving pregnancy results. Moini et al. (1) showed no benefit for using estrogen for luteal phase support in GnRH agonist cycles in a randomised controlled study. Conversely Frahi et al. (2) reported that using oral estrogen in luteal phase support improves implantation and pregnancy rates in GnRH agonist cycles. Most of these studies are about agonist cycles. However Know et al. (3) studied using estrogen for luteal phase support in antagonist cycles and advocated that vaginal bleeding rate decreases and embryo implantation rate increases.

In this retrospective study, we evaluated the efficacy of estrogen in luteal phase support and we found no significant benefit on pregnancy success.

Conclusion: In antagonist protocol stimulated IVF cycles adding estrogen for luteal phase support shows no beneficial effect on pregnancy results.

Keywords: Antagonist protocol, estradiol, luteal phase support

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[PP-181]

Hydatid cyst of the Fallopian tube in an adolescent managed by laparoscopy: Case report and review of the literature

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Hydatid disease is an endemic common parasitic infection mostly affecting the liver and the lungs. Pelvic disease is rarely reported and



Figure 1. Hematoxyline and Eosin stained section-showing fragments of laminated membrane of the cyst wall and the scolex within

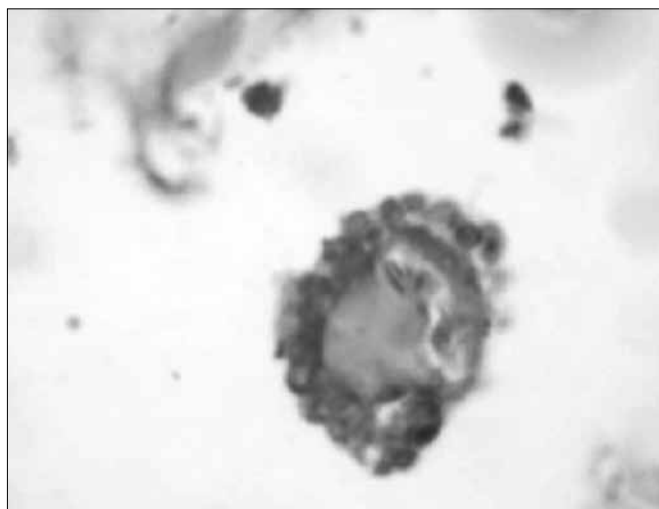


Figure 2. Protoscolex with its hooklet

can manifest itself as adnexial cystic lesion. We report a 20-year old young girl with long lasting pelvic pain and a multiloculated cystic lesion in right ovarian area with a diameter of 10 cms diagnosed by abdominal sonography. No other pathology was detected. Laparoscopic evaluation revealed intact ovaries with an oedematous and dilated right tuba tightly adherent to the neighbouring organs. After adhesiolysis procedure, right salpingectomy was performed. Pathologic examination yielded typical hydatid cyst with scoleces. The incidence of hydatid cyst in female reproductive system is very low (less than 0.5% of all hydatid cysts), but it should be considered in differential diagnosis of pelvic cystic masses, particularly in endemic regions.

Keywords: Pelvic cystic mass, hydatid cyst, adolescent, laparoscopy

[PP-182]

Giant cervical polyp originating from vaginal cuff: Case report

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Objective: Cervical polyps are benign tumors developing from endocervical or ectocervical cells. It is the most common benign tumor of cervix and its frequency is %4. It generally occurs in women at the age of 40s and 50s. It is more frequent in multipar women, and also cervical infection background or oral contraceptive usage can increase its frequency. It is a pink-red coloured fragile mass that can bleed by touching. It is a soft mass with a smooth surface and its size can reach a few millimeters or more. Rarely a cervical polyp can Groove faster and it can prolapsed to the vagina or out of the vagina.

Material and Methods: Case report.

Results: 65 year old patient, she applied to our outpatient clinic with the complaints of vaginal bleeding and a mass that occurs with prolonged standing, straining and lifting heavy. She has these complaints

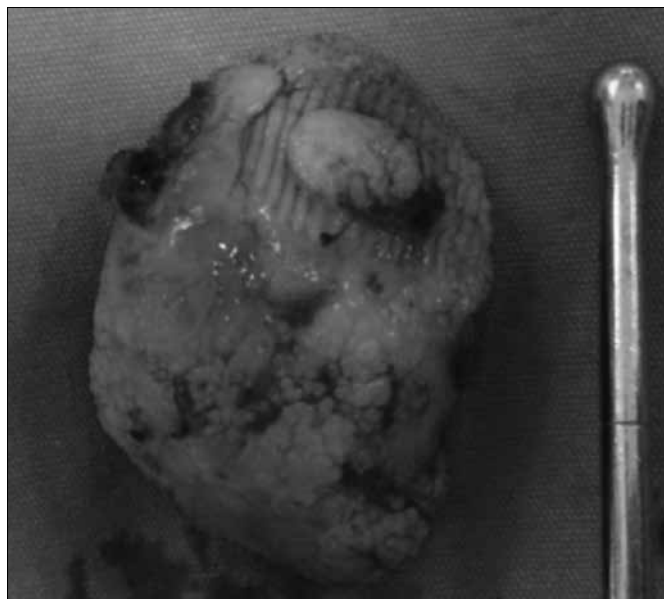


Figure 1. Polyp



Figure 2. Polyp

approximately for 4 months. In her medical history we learned that 26 years ago she has an operation of total abdominal hysterectomy and bilateral salphingoopherectomy. In her vaginal examination we found an approximately 4x3 cm sized, smooth surfaced mass developing from the cuff region with minimally bleeding areas on it. Also probably it is concordant to an extensive based polyp. There were not an additional pathology in ultrasound screening and finally the mass is excised. Its histopathologic diagnosis was reported as Fibroepithelial Polyp. After surgery she applied for control examination and she was not have any complaints.

Conclusion: However cervical polyps can cause abnormal uterine bleedings and postcoital bleedings, they are usually asymptomatic. These polyps are removed by traction-curling or excision. After that we can treat the base of the polyp by chemical cautery, electrocautery or cryocautery. Usually it has a good prognosis. The histopathological examination must be done especially for the fast-growing polyps because they have approximately %1 of neoplastic alteration risk. In routine gynecological examination it is recommended that speculum examination and cuff smear sampling must be done even if the patient has an hysterectomy operation.

Keywords: Polyp, vaginal cuff

[PP-183]

Extraperitoneal leiomyoma of the round ligament of uterus mimicking adnexal mass

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Introduction: Leiomyomas of the round ligament (LRL) of the uterus are very rare tumors which can present as inguinal, pelvic or vulvar masses. These tumors are more common in the extraperitoneal portion of the ligament, including inguinal and vulvar locations, and on the right side. They occur mostly in premenopausal middle-aged women. While most of the cases are asymptomatic some of them might increase in size constantly and become palpable in abdominal or inguinal region. Herein, we report a case of leiomyoma of the left round ligament localized in deep inguinal ring and bulging into the pelvic cavity and mimics adnexal mass.

Case: A 39 year-old woman presented with painless swelling in the left lower quadrant of abdomen. It had been enlarging in size for the previous months and become palpable in the last three months. Her past medical history was unremarkable. Transvaginal ultrasound revealed a solid and heterogenous pelvic mass measuring 8x7 cm localized to left side and differentiated from the uterus. The uterus and contralateral ovary was noted as normal. No pelvic free fluid observed. Preoperative evaluation and tumor markers were normal. A diagnostic laparoscopy was indicated and laparoscopy revealed a mass measuring approximately 8 cm and originating from the extrapelvic portion of the left round ligament of the uterus. It was extending to deep inguinal ring and bulging into the pelvic cavity as well. Other pelvic structures and peritoneal surfaces found to be normal. A decision made to convert to laparotomy. The solid mass was completely 'shelled out' from anterior abdominal wall and left inguinal canal (Figure-1). The frozen section examination of the specimen revealed a mesenchymal tumor of uterus. The postoperative course was uneventful and the patient was discharged on the second postoperative day. Final histopathologic examination confirmed left sided pelvic mass as a LRL.

Discussion: Leiomyomas are the most common pelvic tumors in women. They represent benign sex steroid-responsive smooth uterine muscle tumors originating as clonal expansion of individual myometrial cells. Owing to the fact that estrogen is the most important factor for enlargement and clonal expression, leiomyomas are more likely to be diagnosed in premenopausal women. There are rare locations that should be differentiated from ordinary uterine leiomyomas and other pelvic, adnexal and inguinal masses. LRL is especially occurs in the extraperitoneal segment of the round ligament and due to its primary originating site, it might imitate incarcerated inguinal hernia, lymphadenopathy and ovarian cysts. To avoid misdiagnosis CT scan and MRI can help defining the primary origin of the mass and also determination of the type of surgery. In this case, preopera-

tive ultrasound was performed and the LRL was misdiagnosed as left pelvic mass resembling an adnexal cyst because of the heterogeneity, size and localization. Exploring the abdomen and total excision is sufficient treatment.

Conclusion: Leiomyoma of the round ligament can bulge into the abdominal cavity through the inguinal canal and mimic pelvic/adnexal masses.

Keywords: Adnexal mass, leiomyoma, round ligament

[PP-184]

Pregnancy outcome of a case with Swyer syndrome after bilateral gonadectomy and adjuvant chemotherapy

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Swyer syndrome is a rare disorder characterized by a phenotypic female with an XY karyotype. We presented a patient with Swyer syndrome with a diagnosis of malign germ cell tumor. After bilateral gonadectomy and pelvic lymph node dissection, the patient received four courses of bleomycin, etoposide and cisplatin chemotherapy. The patient was free from tumour recurrence after 13years' follow-up. A successful pregnancy was achieved by oocyte donation and in vitro fertilization. Caesarean delivery was performed at 37 gestational



Figure 1. Extraperitoneal leiomyoma of the left round ligament

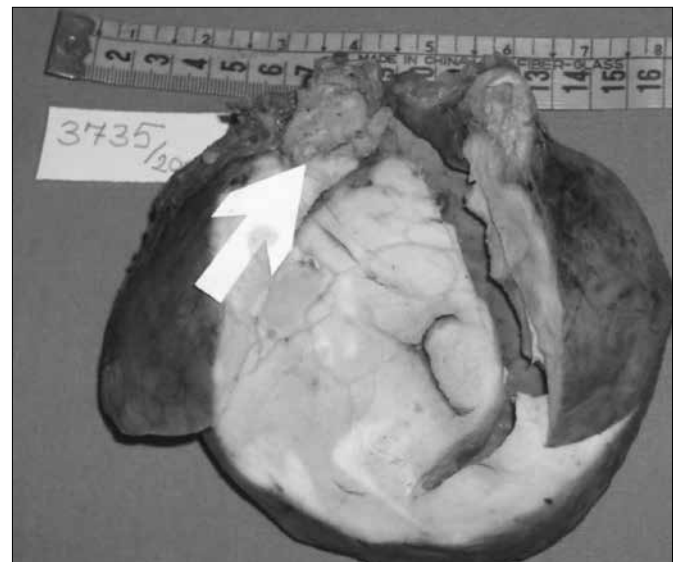


Figure 1. The gross appearance of left ovarian dysgerminoma arising from gonadoblastoma. Note the solid and lobulated surface of gonadoblastoma (white arrow)

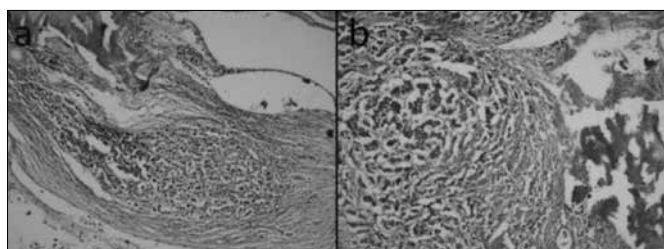


Figure 2. Dysgerminoma is characterized by nests of round germ cells with vacuolated clear cytoplasm and large calcifications; Haematoxylin-eosin, x200 (a). Dysgerminoma consists of nests and cords of tumour cells and divided by occasional fibrous bands with lymphocytes; Haematoxylin-eosin, x100 (b).

weeks due to oligohydramnios and intrauterine growth restriction.

Keywords: 46, XY gonadal dysgenesis; chemotherapy; gonadectomy; pregnancy; Swyer syndrome

[PP-185]

Assessment of serum markers for the diagnosis of preterm delivery in spontaneous late preterm labor

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Objective: The aim of our study is to assess whether serum markers would be useful as a new predictor of preterm birth in patients with spontaneous late preterm labor.

Material and Methods: This study was retrospectively conducted in a tertiary referral medical center between January 2010 and January 2015. Patients diagnosed with late preterm labor were divided into preterm delivery (229 patients) and term delivery (178 patients) groups. The two groups were compared in terms of clinical characteristics and levels of serum markers (leukocyte subtypes, platelet, C-reactive protein [CRP], neutrophil to lymphocyte ratio [NLR] and plate-

Table 1. Significant predictors of preterm delivery in univariate and multivariate regression analysis

Variables	Univariate OR (95% CI)	Univariate p	Multivariate OR (95% CI)	Multivariate p
Leukocyte	1.07 (1.01-1.12)	0.214	1.01 (0.95-1.07)	0.145
Neutrophil	1.10 (0.90-1.24)	0.042	1.05 (0.98-1.14)	0.095
Lymphocyte	0.91 (0.87-0.95)	0.01	0.93 (0.88-0.99)	0.212
NLR	1.56 (1.29-1.78)	0.001	1.41 (1.32-1.51)	0.005
PLR	0.89 (0.79-0.91)	0.145	0.92 (0.87-0.98)	0.265
CRP	1.15 (1.03-1.29)	0.01	1.09 (0.94-1.3)	0.324

CI: confidence interval; CRP: C-reactive protein; NLR: neutrophil to lymphocyte ratio; OR: odds ratio; PLR: platelet to lymphocyte ratio

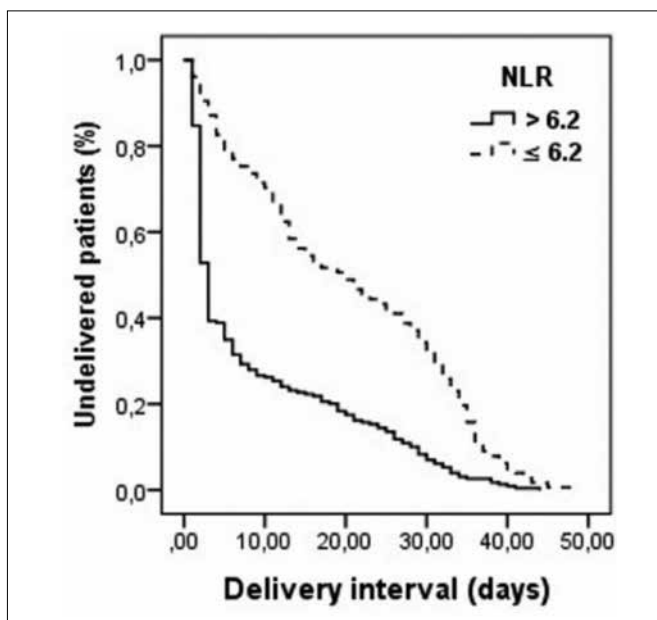


Figure 1. Cox-proportional hazard model of onset of labor to delivery interval according to optimal cut-off point of NLR (≤ 6.2 vs >6.2)

Table 2. Diagnostic sensitivity and specificity of serum markers in study groups

	AUC (95% CI)	Sensitivity % (95% CI)	Specificity % (95% CI)	PPV % (95% CI)	NPV % (95% CI)	LR+ (95% CI)	LR- (95%CI)	Cut-off value
Leukocyte	0.616 (0.561-0.671)	54.6 (47.9-61.2)	61.2 (53.7-68.4)	64.4 (57.3-71.2)	51.2 (44.2-58.1)	1.41 (1.13-1.75)	0.74 (0.62-0.89)	10.8
Neutrophil	0.623 (0.568-0.678)	52.4 (45.7-59.1)	52.2 (44.6-59.8)	58.5 (51.5-65.4)	46 (39-53.2)	1.1 (0.9-1.34)	0.91 (0.75-1.11)	9.7
Lymphocyte	0.634 (0.580-0.688)	48.9 (42.3-55.6)	51.7 (44.1-59.2)	56.6 (49.3-63.6)	44 (37.2-51)	1.01 (0.83-1.24)	0.99 (0.82-1.20)	1.4
Monocyte	0.508 (0.450-0.566)	34.9 (28.8-41.5)	43.8 (36.4-51.4)	44.4 (37-52)	34.4 (28.2-40.9)	0.62 (0.50-0.77)	1.48 (1.23-1.80)	0.60
Eosinophil	0.519 (0.461-0.576)	39.3 (32.9-45.9)	56.2 (48.6-63.6)	53.6 (45.7-61.3)	41.8 (35.5-48.4)	0.90 (0.71-1.13)	1.08 (0.91-1.28)	0.11
Basophil	0.536 (0.480-0.592)	41.9 (35.4-48.6)	54.5 (46.9-62)	54.2 (46.6-61.7)	42.1 (35.7-48.8)	0.92 (0.74-1.15)	1.07 (0.90-1.27)	0.036
Platelet	0.548 (0.491-0.604)	48 (41.4-54.7)	27 (20.6-34.1)	45.8 (39.4-52.4)	28.7 (22-36.2)	0.66 (0.56-0.77)	1.93 (1.47-2.53)	221
NLR	0.711 (0.662-0.760)	65.1 (58.5-71.2)	62.4 (54.8-69.5)	69 (62.3-75.1)	58.1 (50.8-65.2)	1.73 (1.40-2.14)	0.56 (0.45-0.69)	6.2
PLR	0.590 (0.531-0.649)	45.8 (39.3-52.5)	61.2 (53.7-68.4)	60.3 (52.7-67.7)	46.8 (40.2-53.4)	1.18 (0.94-1.49)	0.88 (0.75-1.04)	147.4
CRP (mg/L)	0.643 (0.588-0.698)	58.1 (51.4-64.5)	59 (51.4-66.3)	64.6 (57.6-71.1)	52.2 (45.1-59.3)	1.42 (1.15-1.74)	0.71 (0.58-0.86)	0.82

AUC: area under curve; CI: confidence interval; CRP: C-reactive protein; LR+: positive likelihood ratio; LR-: negative likelihood ratio; NLR: neutrophil to lymphocyte ratio; PLR: platelet to lymphocyte ratio

let to lymphocyte ratio [PLR]) which were obtained at admission.

Results: The levels of leukocyte ($p<0.001$), neutrophil ($p<0.001$), CRP ($p=0.001$), NLR ($p<0.001$) and PLR ($p=0.003$) were significantly higher, whereas lymphocytes ($p=0.012$) were significantly lower in preterm delivery group compared to term delivery group. On multivariate regression analysis, NLR positive was the most powerful predictive variable (OR=1.41; 95% CI: 1.32-1.51; $p=0.005$). NLR had the highest area under curve (0.711; 95% CI 0.662-0.760) in predicting preterm birth and a NLR >6.2 had the highest sensitivity (65.1%) and specificity (62.5%).

Conclusion: High NLR at admission is an independent predictor of preterm birth in patients with spontaneous late preterm labor.

Keywords: Lymphocyte, neutrophil, preterm delivery, preterm labor

[PP-186]

A rare case with triple synchronous malignancies in genital tract; primary endometrial, ovarian and fallopian tubal carcinoma

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Introduction: Synchronous malignancies are usually defined as two or more primary tumors that occur in a patient at the same time. In the gynecologic oncology field detection of three or more tumors is extremely rare. Herein we present a case of a postmenopausal woman with a concurrent simultaneous endometrial, ovarian and fallopian tubal carcinoma.

Case: The case was a 52-year-old postmenopausal woman with the complaint of postmenopausal hemorrhage. Pelvic examination was normal and no palpable masses noticed. Transvaginal ultrasound (TVUSG) showed slight thickening of the endometrium and enlargement of the right ovary (53x42 mm) with thin septas. Computerized tomography (CT) scan revealed a 57*48 mm right adnexal mass (Figure 1). Tumor markers were within the normal range. Endometrial biopsy had planned and the histopathological diagnosis was resulted as adenocarcinoma of endometrium. Debulking surgery planned. Following unilateral salpingo-oophorectomy, specimen sent to frozen sec-

tion examination and resulted as mucinous adenocarcinoma of the ovary (Figure 2). Surgical staging was performed and final pathology result was reported as synchronous stage IA grade 2, mucinous adenocarcinoma of the right ovary, stage IA grade 2, endometrioid adenocarcinoma of the uterus and in situ serous cystadenocarcinoma of the right fallopian tube. All of the three tumors were accepted as different

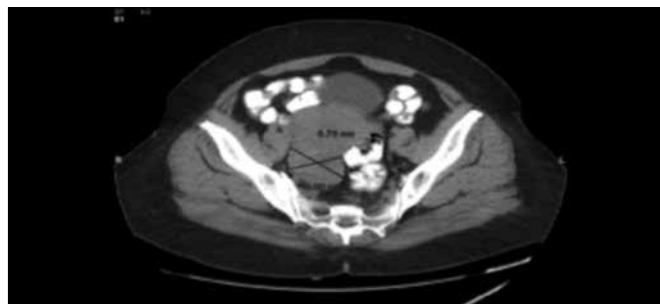


Figure 1. 53x42 mm measured right adnexal mass in CT scan



Figure 2. Right oophorectomy specimen

Table 1. Synchronous primary cancers of female reproductive tracts (including salpinx) existing in the literature

Reference	Patient age	Anatomic Site	Tumor histology	Outcome follow-up
Atasever et al. (16)	35	Salpinx	Microinvasive carcinoma in situ	Died of disease
		Ovary	Papillary serous adenocarcinoma	29 months
		Endometrium	Endometrial intraepithelial adenocarcinoma	
		Cervix	Endocervical carcinoma in situ	
Saglam et al. (17)	63	Salpinx	Early papillary adenocarcinoma	No evidence of disease
		Ovary	Mucinous adenocarcinoma	12 months
		Endometrium	Endometrial adenocarcinoma	
		Cervix	Endocervical adenocarcinoma	
Present study	52	Salpinx	Serous cystadenocarcinoma in situ	Disease free survival
		Ovary	Mucinous adenocarcinoma	39 months
		Endometrium	Endometrial adenocarcinoma	

primaries. In the postoperative period medical oncology council did not suggest any adjuvant therapy. In the follow-up stage no evidence of recurrence noted.

Discussion: Synchronous malignancies in female genital tract are rare. The most common malignancies in genital tract that coexist together are ovary and endometrium. The etiology of this coexistence is still unclear but it has been postulated that tissues of a common embryologic origin may develop synchronous neoplasms when simultaneously exposed to certain carcinogens. According to criterias described previously the tumors must have different histopathology and distant metastasis, connection between the tumors and myometrial invasion should not be noted. Patients with synchronous malignancies have a better outcome than the patients who have metastatic diseases in the same organs. Owing to early detection opportunity in combination with endometrial carcinomas, postmenopausal hemorrhage complaint of the patient generated a chance to early diagnosis in this case. Because of this fact severe invasion and metastasis risk excluded and no postoperative therapy suggested for the patient. There was no recurrence observed after 39 months from operation. There are reported two cases with coexisting malignancies include fallopian tube carcinomas in the literature and the characteristics of the cases are given in Table 1. Genetic transition must be considered in synchronous malignancies.

Conclusion: Triple synchronous malignancies in genital tract are extremely rare. As distinct from the most of the previous cases, one of the primaries are originated from fallopian tubes, the different histopathology of all the tumors and 39 months of disease free survival in the follow-up period is the value of this case report.

Keywords: Coexisting neoplasms, gynecologic oncology, synchronous malignancy

Table 1. Demographic and obstetric characteristics of study groups

	PPROM (+)	PPROM (-)	p
Maternal age (y)	27.3±4.9	26.1±3.4	0.044
Gestational week	30.7±4.5	31.4±2.9	0.222
Gravidity	2.4±1.4	2.5±1.3	0.434
Parity	0.97±1.1	0.93±0.8	0.768
Abortus	0.3±0.8	0.2±0.5	0.300
History of			
Amniocentesis	3	2	0.651
Preterm birth	9	5	0.406
PPROM	6	4	0.746
Cervical dilatation (cm)	1.14±0.97	0.33±0.55	<0.001
Cervical effacement (%)	24±27.4	8.3±17.9	<0.001
Amniotic fluid index	75.2±43.4	122.9±31.6	<0.001
Leukocyte count	12.9±4.5	11.9±3.7	0.11
Urea	22.9±10.5	1.98±4.2	<0.001
Creatinine	0.51±0.31	0.09±0.17	<0.001
Administration of corticosteroids	84	0	<0.001
Delivery interval (d)	3.1±1.89	NA	
Cesarean delivery	28	16	0.041
Birthweight	1818±645	3249±445	<0.001
5 min. APGAR score	6.2±2	7.1±1.3	<0.001

Data are presented as mean ± standard deviation or n (%)
PPROM: preterm premature rupture of membranes

[PP-187]

Use of urea and creatinine levels in vaginal fluid for the diagnosis of preterm premature rupture of membranes and delivery interval after membrane rupture

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Objective: To determine whether urea and creatinine measurements in vaginal fluid could be used to diagnose preterm premature rupture of membranes (PPROM) and predict delivery interval after PPRM.

Material and Methods: A prospective study conducted with 100 pregnant women with PPRM and 100 healthy pregnant women between 24+0 and 36+6 gestational weeks. All patients underwent sampling for urea and creatinine concentrations in vaginal fluid at the time of admission. Receiver operator curve analysis was used to determine the cut-off values for the presence of PPRM and delivery within 48 hours after PPRM.

Results: In multivariate logistic regression analysis, vaginal fluid urea and creatinine levels were found to be significant predictors of PPRM ($p<0.001$ and $p<0.001$, respectively) and delivery within 48

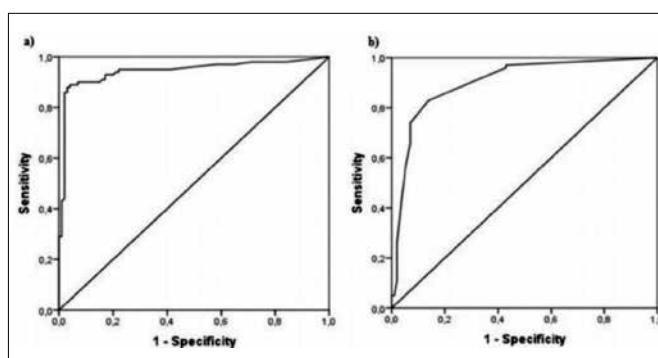


Figure 1. Receiver operating characteristics curve analysis of vaginal fluid (a) urea (mg/dL) and (b) creatinine (mg/dL) in the prediction of preterm premature rupture of membranes

hours after PPRM ($p=0.012$ and $p=0.017$, respectively). The optimal cut-off values for the diagnosis of PPRM were >6.7 mg/dL for urea and >0.12 mg/dL for creatinine. The optimal cut-off values for the detection of delivery within 48 hours were >19.4 mg/dL for urea and >0.23 mg/dL for creatinine.

Conclusion: Measurement of urea and creatinine levels in vaginal fluid is a rapid and reliable test for diagnosing and also for predicting delivery interval after PPRM.

Keywords: Preterm premature rupture of membranes, vaginal fluid, urea, creatinine, delivery interval

Table 2. Literature review of the use of vaginal fluid urea and creatinine for the detection of PROM from 2000–2015

Authors	GA range (weeks)	PROM group (n)	Control group (n)	Urea Cut-off value (mg/dL)	Urea Mean±SD (mg/dL)	Creatinine Cut-off value (mg/dL)	Creatinine Mean±SD (mg/dL)
El-Sabee et al.	28-40	32	32	9	32.9	0.9	1.7
Kafalı et al.	14-41	47	56	12	34.6±5.3	0.6	1.5±0.3
Kariamn et al.	20-41	42	42	7	14.7±4.27	0.55	1.4±0.4
Mohammed et al.	28-40	122	80	>13.2	37.8±6.2	0.31	1.23±0.32
Kariman et al.	14-41	60	53	6	13.77±5.41	0.45	1.58±1.01
Osman et al.	28-40	50	50	0.41	1.87±0.45	0.23	1.1±0.38
Tıgh et al.	27-42	75	75	10	8.67±7.3	0.3	0.58±0.59
Mostafa et al.	N/A	50	50	12	40.3±9	1	1.45±0.26
Tigga et al.	28-40	50	50			0.16	0.26±0.06
Li et al.	>28	10	10			N/A	0.95
Gurbuz et al.	>28	54	34			0.12	0.70±0.55
Movahed et al.	28-42	N/A	N/A			0.9	N/A
Sekhavat et al.	28-40	30	30			0.14	0.4±0.20
Zanjani et al.	28-40	60	60			0.5	1.74±0.8
Urdaneta-García et al.	20-36	135	135			0.45	1.09±0.35

PROM: preterm premature rupture of membranes; GA: gestational age; SD: standart deviation

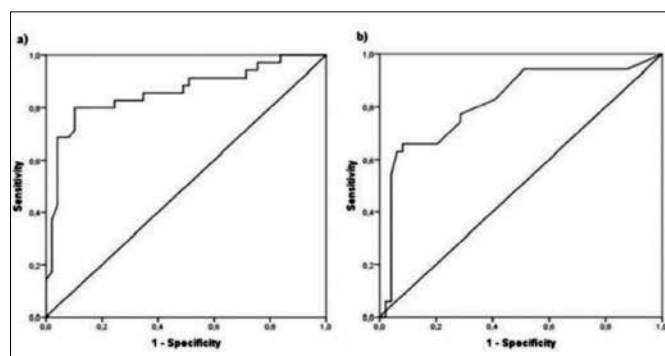


Figure 2. Receiver operating characteristics curve analysis of vaginal fluid (a) urea (mg/dL) and (b) creatinine (mg/dL) in the prediction of delivery within 48 h after preterm premature rupture of membranes

Objective: The aim of this study was to investigate whether the netrin-1 levels in maternal serum was associated with presence of pre-eclampsia.

Material and Methods: Total 72 patients, including 28 normal pregnant women and 44 patients with preeclampsia, were included in this study. Maternal serum netrin-1 concentrations were measured by ELISA.

Results: Levels of netrin-1 were detected statistically lower in pre-eclamptic group than control group. Netrin-1 levels were also lower in severe preeclampsia group than mild preeclampsia group but this was not detected statistically different.

Conclusion: Maternal serum Netrin-1 has a potential to be a new marker for the detective of preeclampsia.

Keywords: Netrin-1, preeclampsia, placenta, vasculogenesis

[PP-189]

[PP-188]

Decreased maternal serum Netrin-1 levels as a new predictor of preeclampsia

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Pena – Shokeir Syndrome, prenatal ultrasound and autopsy findings

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Introduction: Pena – Shokeir syndrome was first described in 1974 and is a fatal disease (1). Incidence is 1 per 12000 live births. It is an autosomal recessive condition which has two types. Type 1 is characterised with multiple joint contractures (arthrogryposis), facial anomalies, polyhydramnios, fetal growth retardation and pulmonary hypoplasia. This type is featured in “Fetal Akinesia Deformation Sequence (FADS)” that has similar phenotypic characteristics (2, 3). A neuronal or muscular defect is evident, however etiology is not yet clarified (1-4). Diagnosis can be made on 14th gestational week (5). We have discussed a case of Pena – Shokeir type 1 syndrome, prenatal ultrasound and postnatal autopsy findings.

Case: A 34 year old woman presented in our outpatient clinic with the complaint of decreased fetal movements at 22nd week of gestation. It was her first pregnancy. In ultrasonographic evaluation, lack of active fetal body movements, multiple joint contractures in both upper and lower extremities, facial anomalies, polyhydramnios and a septated cystic hygroma were identified. Persistent flexion on arms, ulnar deviation of hands and claw-hand appearance were present on upper extremities (Figure 1). Extension deformity cross position of legs, pes equinovarus and rocker-bottom feet were present on lower extremities. Micrognathia, flat bridge of nose and protruded eyes were present as facial anomalies. Amniocentesis was performed for chromosomal analysis. Normal karyotype (46 XY) was the result. Pregnancy was terminated on 23rd gestational week. Fetal autopsy was performed. Prenatal findings were confirmed by autopsy (Figure 2). Additionally, pulmonary hypoplasia, lobar anomaly of right lung (2 lobes),

shortness of umbilical cord (17 cm) were found out. Telecanthus, low ears, higher upper palate were also identified.

Discussion: Pena – Shokeir syndrome type 1 is a hereditary disease characterised by neurogenic arthrogryposis, facial anomalies and pulmonary hypoplasia. Dysmorphic features are thought to be the result of fetal akinesia. Muscular atrophy and joint contractures are due to insufficient fetal movements, pulmonary hypoplasia is due to the neuromuscular deficiency of diaphragm and intercostal muscles, polyhydramnios is the result of fetal inability to swallow, craniofacial defects are due to insufficient development of facial musculature (2, 6).

Diagnosis is usually made by ultrasonographic examination (2, 5-7). Amniocentesis must be performed because trisomy 18 should be ruled out (2, 6, 7). Arthrogryposis in lower extremities, rocker-bottom feet and micrognathia may be seen in both clinical conditions. In our case which has joint contractures, polyhydramnios, flat nasal bridge and normal karyotype, prenatal diagnosis was primarily in favor of Pena – Shokeir syndrome. Postnatal autopsy is crucial for not only the confirmation of existing signs; but also for new signs to emerge. On the other hand, autopsy is suitable way for histopathologic evaluation that could enlighten the etiopathogenesis (8). Fetal akinesia may be a result of neurogenic and myopathic disorders, restrictive dermopathy, teratogen exposure and intrauterine obstruction (3, 9). Genetic counseling is crucial for subsequent pregnancies and early diagnosis; since the recurrence rate of Pena-Shokeir syndrome is 0 to 25% (2, 7, 12). At that point, accurate diagnosis and genetic counseling is rather important however, the only way to make this possible is a comprehensive assessment of clinical findings, imaging, amniocentesis and autopsy.

Keywords: Pena-Shokeir syndrome, prenatal diagnosis, autopsy, fetal akinesia

[PP-190]

Human papilloma virus positivity in patients who have abnormal cervical cytology

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Objective: Prevention and early detection of preinvasive cervical lesions are very important because of a probability for progression to cervical cancer. The Papanicolaou smear screening test (cervical cytology), which has been associated with a reduction in cervical cancer incidence, has become a model for cancer screening. Although cervical cytology is the routinely used procedure for cervical cancer, Human Papilloma Virus- DNA (HPV-DNA) screening in cervical samples is recommended as either an alternative or complementary diag-



Figure 1.



Figure 2.

Table 1. Cervical Cytology Results and HPV Positivity

Cervical Cytology Results	HPV Positivity
ASCUS (n=56)	14.3%
LGSIL (n=32)	71.9%
HGSIL (n=16)	81.3%

Table 2. Colposcopy Results and HPV Positivity

Colposcopy Results	HPV Positivity
CIN1	21.1%
CIN 2	62.5%
CIN 3	46.1%
Invasive Cancer	88.8%

nostic tool to cervical cytology. The aim of this study is to detect HPV prevalence and HPV types among patients with abnormal cervical cytology.

Material and Methods: A total of 104 patients who applied to Şişli Hamidiye Etfal Training and Research Hospital, Gynecology outpatient Clinic and who had abnormal cervical cytology result were enrolled to the study. Patients who had pathological cervical appearance or Pap smear results of ASCUS, LSIL or HSIL were referred to colposcopy. Cervical samples for HPV DNA were taken from the patients before Pap smear sampling during the routine examination or before the colposcopic evaluation. HPV DNA was investigated by PCR method in cervical samples. HPV positivity in abnormal cervical cytology group and colposcopy group were determined.

Results: Mean age was 32 ± 9.4 years. Mean parity was 3.12 ± 1.54 and mean gravida was 4.28 ± 2.48 . In cervical cytology, ASCUS was detected in 56 patients (53.8%); LGSIL in 32 patients (30.8%) and HGSIL in 16 patients (15.4%) according to the Bethesda classification system. HPV-DNA of high risk types was demonstrated in 42 patients (40.3%). HPV 16 was the most common genotype and the prevalence was 25% among other types. The mean age of HPV positive patients was significantly lower than HPV negative groups ($p < 0.001$). There was no significant difference between the groups in terms of other demographic and clinical characteristics ($p > 0.05$). HPV positivity in abnormal cervical cytology group was 14.3% in ASCUS; 71.9% in LGSIL and 81.3% in HGSIL group. HPV prevalence was 21.1%, 62.5%, 46.1%, 88.8% among cervical intraepithelial neoplasia CIN1, CIN 2, CIN 3, invasive cervical cancer cases respectively. CIN 2 is more likely to be associated with HPV positivity than other cervical intraepithelial neoplasia grades.

Conclusion: Cervical cancer, the precursor lesions and invasive form of which is associated with high risk genotypes of human papilloma virus, is the second most common cancer among women worldwide. Our study demonstrated that HPV-DNA screening can be a useful diagnostic tool especially for detecting high grade cervical lesions and combination of HPV-DNA screening with cervical cytology is the most effective strategy for prevention and early detection of preinvasive cervical lesions.

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Keywords: Human papillomavirus (HPV), cervical cancer screening, Papanicolaou smear, cervical cytology

[PP-191]

What is the upper limit of cesarean section?

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Objective: Cesarean section (CS) is one of the most common obstetric procedures around the world and an increased rate of cesarean section has been observed in recent studies. Maternal and fetal mortality and morbidity associated with cesarean section is an important worldwide health problem. This requires the evaluation of the effect of repeated cesarean delivery on maternal morbidity. We present a case of eighth cesarean section who admitted to our clinic.



Figure 1. The abdominal image of the patient

Case: A 30 years old Syrian woman who have had 7 CS admitted to our clinic with 36 week's of gestation. Ultrasound scan revealed that 36 week viable fetus, anterior placenta and normal amniotic fluid. We performed CS and tubal ligation to the patient (Picture 1). Operation time was 40 minutes and we did not observed intraabdominal adhesions, bladder and bowel injury. The patient delivered a male infant with a birth weight of 2900 g and APGAR score was 7/8. Postoperative complete blood cell parameters are as follows: the white blood cell count was 10790/mikrol, the haemoglobin was 10.2 g/dL, the hematocrit was 31.5%, the platelet 199,000, and biochemical results were normal. Perioperative and postoperative complication were not observed and the patient was discharged on second day.

Conclusion: Repeated CS increases the risk of uterine rupture and intraoperative complications including longer operating times due to severe adhesions, blood loss and blood transfusion, bladder and bowel injury, presence of placenta previa, cesarean hysterectomy, need for intensive care unit, wound infection making these patients a high-risk group. No absolute upper limit for the number of repeat cesarean deliveries can be given. A total of 4 or more CSs was identified as the critical level for most of the major complications. Patients must be informed of the risks of multiple CSs and encouraged to have tubal ligation.

Keywords: Delivery, operation, cesarean section

[PP-192]

Postoperative nursing care in gynecologic laparoscopic surgery

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In this study; It emphasized the importance of gynecological surgery in patients with post-operative nursing care.

Laparoscopy; It is monitored by an optical system of the abdominal cavity. Since 20 years of laparoscopic surgery in urology, gynecology and although used in gastrointestinal surgery, is now seen as the most important developments in modern surgery.

provide care to patients undergoing surgical intervention after an indispensable professional nursing care to prevent complications of the profession. In this period or to minimize complications is to contribute to the treatment of early noticing. After surgery, the patient will begin to take delivery of the operating objectives and the planning of care is taken to the service systematically resumes.

Laparoscopic Treatment Process; It is similar to the care of patients undergoing open surgery.

Care for the maintenance of cardiac function, for following hemorrhage, gastrointestinal system to be sustainable, to ensure the fluid and electrolyte balance, movement - mobilization care objectives for maintaining and sustaining the wound care are available.

Postoperative patient care, nurses' health services provided by a significant part of the oluşturur. Early mobilization, switch to diet, timely withdrawal of vessels and drainage catheters, and the timing correct lab values, correct wound care practices, appropriate antibiotic prophylaxis, it forms the cornerstone of a successful post-operative care of surgical infection.

Keywords: Laparoscopy, nursing care

[PP-193]

A case of peritoneal strumosis: Procedure of VATS and Laparotomy performed

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Background: Struma ovarii is a rare, monodermal teratoma consisting of mature thyroid follicular cells. This is 1% of ovarian neoplasm. Mainly symptoms are pelvic mass and pain. Ascites could be seen in some cases. In some cases like this one benign tumors can seed of the peritoneum, called strumosis.

Summary: 75-year-old gravida 2 parity 2 woman presented with abdominal pain as outpatient. After monitorization with ultrasonography and CT adnexial mass, ascite, and also pleural effusion were detected. Ascite cytology resulted as mesotel cells. Tumor marker levels are normal. As intraoperative findings omentum was placed inside hernia pouch, there were 2000 cc ascite and 8-9 cm adnexial mass orgining from left ovary. The case was consulted CTS for VATS, Pleural effusion was aspirated. Histopathological result is documented as strumosis.

Conclusion: Peritoneal strumosis is occasionally seen with ascite. In this case it is accompanied by pleural effusion and normal thyroid hormone levels.

Keywords: Strumosis, peritoneal, VATS

[PP-194]

How 24 chromosome screening improve the PGS (Preimplantation genetic screening) efficacy

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Objective: To document our genetic laboratory's experience on array-CGH based comprehensive chromosome screening and to present the data applied in our center between July 2014 - March 2016.

Material and Methods: All single cells were collected in 2µL PBS solution. Whole genome amplification procedure was performed with SurePlex DNA Amplification Kit (Illumina, Inc). WGA products were processed according to the Bluegenome 24sure V3 protocol (available at www.cytochip.com). These products were fluorescently labeled and competitively hybridized to 24sure V3 arrays with a matched con-

trol sample in array-CGH method. The following bioinformatics analysis was accomplished with a pre-release version of BlueFuse Multi (Illumina, Inc.) (<http://www.illumina.com/products/veriseq-pgs.html>).

Results: In total of 142 patients, 467 embryos were screened by using array-CGH. 153 (32%) of these 457 embryos were normal. 87 (19%) aneuploidies, 191 (40%) complex aneuploidies, 12 (3%) mosaicism and 7(2%) partial deletion /duplications were observed. 17(4%) embryos were not determined due to amplification failure. Rather than 13,16,17,18,21,22,X,Y chromosomes detected by FISH, array-CGH identified aneuploidies in other chromosomes as well. Array-CGH was able to detect additional 32% chromosomal aneuploidies which can not be detected by FISH.

Conclusion: Performing the genetic analysis using FISH technology did not result in an increase in the chance for the patient to have a successful IVF cycle. FISH technology was usually looking at only 5 chromosomes out of 23. Therefore, the FISH test would miss many chromosomal abnormalities. At this point 24 chromosome screening PGS applications like Array-CGH are very competitive supported by reports suggesting improved IVF success.

Keywords: Array comparative genomic hybridization, chromosome abnormalities, embryo, infertility

[PP-196]

Sexual function and quality of life in a sample of postmenopausal women

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Objective: While epidemiologic data are limited, the available estimates are that 43% of women complain of at least one sexual problem. In spite of the high prevalence, less attention has been paid to the sexual problems of postmenopausal women. Menopause is a natural part of the aging process in women and has been reported to have a negative impact on the quality of life (QoL). It was found that natural menopause is an independent predictor of a lower QoL in physical functioning. QoL is a multidimensional concept that includes variables related to one's physical health, psychological health, level

of independence, social relationships, and their relationships to salient features of their environment. In the present study, we examined the relationship between the sexual functions of postmenopausal women and quality of life parameters.

Material and Methods: 67 postmenopausal women consequently presented to the Ankara Zekai Tahir Women's Hospital Climacteric Clinic were enrolled in this study. All participants were administered a structured socio-demographical form, 7-item Relationship Assessment Scale (RAS), Female Sexual Function Index (FSFI), and 36-Item Short-Form Health Survey (SF-36). The data of 55 women who have spouses were analyzed for the relevant measures. The data analysis was performed using SPSS version 23 for Windows. Correlations and partial correlations were performed using Pearson's correlation tests. A multiple linear regression model was used to identify independent predictors for FSFI domain and total score. A p value less than 0.05 was considered statistically significant.

Results: For the study group, mean age was 52.6 ± 6.14 years, mean age at the beginning of the menopause were 46.46 ± 5.58 years and mean duration of the menopause was 6.23 ± 4.94 years. SF-36 social function scores were positively correlated with the sexual desire, arousal, degree of lubrication, ability to achieve orgasm, intercourse satisfaction, and pain domain scores FSFI and FSFI total scores ($r=0.336$, $p<0.01$; $r=0.438$, $p<0.01$; $r=0.364$, $p<0.01$; $r=0.548$, $p<0.01$; $r=0.484$, $p<0.01$, $r=0.427$, $p<0.01$; $r=0.411$, $p<0.01$; respectively). SF-36 physical function scores were positively correlated with arousal, pain, and FSFI total scores ($r=0.372$, $p<0.01$; $r=0.411$, $p<0.01$; $r=0.321$, $p<0.01$; respectively). SF-36 physical role difficulties scores were positively correlated with ability to achieve orgasm and pain scores ($r=0.363$, $p<0.01$; $r=0.384$, $p<0.01$; respectively). SF-36 social function scores were significantly predictive of FSFI domains of arousal, ability to achieve orgasm, intercourse satisfaction, pain, and FSFI total scores ($\beta=0.450$, $p<0.05$; $\beta=0.558$, $p<0.01$; $\beta=0.546$, $p<0.01$; $\beta=0.428$, $p<0.05$; $\beta=0.435$, $p<0.05$; respectively) independent of patients' age and menopause age.

Conclusions: In this group female sexual function index scores in which higher scores indicates better sexual function and they are correlated with social function, physical function, and physical role difficulties subscales of the SF-36. Social function scores predicted arousal, ability to achieve orgasm, intercourse satisfaction, pain, and FSFI total score domains when controlled for the age and menopause duration. Identification of predicting factors such as age, menopause age, duration of menopause, and QoL will help to improve sexual functioning of these women allowing planning of psychological consultations and practical interventions.

Keywords: Postmenopause, sexual function, quality of life

Table 1. Correlations between the FSFI subscale scores and SF-36 subscale scores

FSFI Subscales (r)	Physical function	Physical role difficulties	Emotional difficulties	Vitality (Energy)	Mental health	Social function	Pain	General health
Desire	.241	.119	.142	-.018	.037	.336**	-.221	-.066
Arousal	.372**	.271*	.218	.126	.192	.438**	-.227	.080
Lubrication	.275*	.220	.189	.128	.162	.364**	-.160	-.088
Orgasm	.313*	.363**	.314*	.104	.099	.548**	-.320*	-.037
Satisfaction	.298*	.293*	.223	.049	.105	.484**	-.242	-.040
Pain	.411**	.384**	.230	.027	.068	.427**	-.284*	-.182
FSFI Total	.321**	.253*	.163	.038	.117	.411	-.248*	-.043

FSFI: Female Sexual Function Index; SF-36: 36-Item Short-Form Health Survey

* $p<0.05$; ** $p<0.01$

Table 2. A multiple linear regression analysis between FSFI domain and total score and SF-36 scores

Sexual function dimension	Quality of life dimension	B	p	F	df	R2	Model p
Sexual desire	—	3.854	0.469	0.985	10	0.170	NS
Arousal	SF	0.450	0.029	1.991	10	0.293	P < 0.05
Degree of lubrication	—	1.832	0.357	1.136	10	0.191	NS
Ability to achieve orgasm	SF	0.558	0.006	2.439	10	0.337	P < 0.01
Inter course satisfaction	SF	0.546	0.009	1.956	10	0.290	P < 0.01
Pain	SF	0.428	0.034	2.323	10	0.326	P < 0.05
Total score	SF	0.435	0.039	1.559	10	0.234	P < 0.05

SF: SF-36 – Social Functioning; NS: not significant

[PP-197]

Prenatal diagnosis of aqueductal stenosis: A Case Report

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Introduction: Aqueductal stenosis is the most common cause of congenital hydrocephalus. Estimated incidence is at 1:5000 births. Mortality is closely related to the presence of additional anomalies, whereas neuropsychologic development relates to abnormalities of the central nerve system. The natural history of isolated aqueductal stenosis remains difficult to define, as many cases are terminated. Here we reported an isolated fetal aqueductal stenosis.

Case: A 26-year-old, gravid 2 para1, referred to our antenatal unit at 20 weeks of gestation because of the ultrasound findings of a mild ventriculomegaly. She was from a nonconsanguineous couple with non-contributive anamnesis. Her previous pregnancy was uneventful. Sonographic examination revealed a singleton female fetus with biometric measurements consistent with dates and normal amniotic fluid volume. Detailed examination of the fetal cranial anatomy size of the both lateral ventricular atria was 12mm and size of the third cerebral ventricle was 2.12 mm (Figure 1). Prenatal diagnosis of aqueductal stenosis was based on sonographic demonstration of mild bilateral ventriculomegaly, dilatation of the third ventricle and without other cranial malformations. A normal posterior fossa was present in each instance. Another associated structural anomaly was not detected and fetal cardiac examination was normal. MRI was performed which showed mild hydrocephalus and the diagnosis of aqueductal stenosis was confirmed by a detailed examination of the fetal head and spine to rule out other causes of hydrocephalus such as Dandy Walker malformation, Chiari II malformation, agenesis of the corpus callosum and holoprosencephaly (Figure 2). Her first trimester screening tests and the serological tests were normal (toxoplasmosis, rubella, CMV,



Figure 1. Transverse plane showing dilatation of the lateral ventricle



Figure 2. a-c. Prenatal T2-weighted axial and sagittal MRI of aqueductal stenosis. Shown is the fetus in utero with enlarged lateral ventricles (a), axial view of enlarged lateral ventricles and normal fourth ventricle (b), obstruction is present in the distal third of the aqueduct (c)

herpes). She refused all fetal interventional managements. She opted for continuation of pregnancy. Fetal death occurred at 28 weeks and so pregnancy was terminated.

Conclusion: Sonographically, aqueductal stenosis is a diagnosis of exclusion, confirmed only by a meticulous examination of the fetal head. Antenatal MRI may allow diagnosis of aqueductal stenosis by showing hydrocephalus in association with normal fourth ventricle and absence of aqueductal lumen. The prenatal diagnosis is based on fetal ultrasonic examination and MRI and may be obtained late in the pregnancy leading to therapeutic and ethical tricky decisions.

Keywords: Antenatal MRI, aqueductal stenosis, congenital hydrocephalus, holoprosencephaly, fetal ultrasonography

[PP-198]

Repeating Familial Fetal Cystic Hygroma with Normal Karyotype

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Cystic hygromas are the consequences of anomalies of the lymphatic system and are mostly related with chromosomal abnormalities. Turner syndrome, trisomy 21, trisomy 18, and trisomy 13 are the most frequently detected chromosomal abnormalities related with cystic hygromas. Regardless of gestational age aneuploidy is the most likely cause of prenatally diagnosed cystic hygromas.

Recurrence of fetal cystic hygroma in subsequent pregnancies is extremely rare. A few reports have suggested existence of an autosomal recessive trait of cystic hygroma.

A 32 year old gravida 10 para 1 with no parental consanguinity was initially seen at 12th week of gestation. She had eight abortuses with two of them were diagnosed with cystic hygroma each ended with fetal demise at 12th and 16th weeks of gestation respectively. One the fetuses underwent autopsy and chromosomal analysis. That fetus was a 46, XY with normal anatomical structure. In her latter pregnancy a cystic hygroma of 20 mm was detected at 12 weeks of gestation and chorion villus sampling was performed at the same visit. The chromosomal constitution of the fetus and both of the parents were normal. Indirect Coombs toxoplasmosis, rubella, cytomegalovirus, and parvovirus tests were negative. Termination of pregnancy was suggested but the patient decided to continue pregnancy. Fetal hydrops fetalis developed at 19 weeks of gestation and pregnancy was terminated but autopsy was not performed.



Figure 1. Cystic hygroma

This case supports that cystic hygroma, associated with a normal karyotype, can be inherited by a Mendelian autosomal recessive pattern.

Familial recurrence of cystic hygromas can be a result of a variety of genetic mechanisms as autosomal dominant with variable expression, germline mosaicism or autosomal recessive. The presence of affected female and male fetuses with unaffected siblings rules out an X-linked inheritance. An autosomal recessive inheritance pattern could be the mechanism since there are several cases reported in consanguineous families. Cystic hygromas are usually lethal in recurrent familial cases compared to euploid sporadic cases. Most of the fetuses with cystic hygromas have abnormal karyotype and recurrences are rare and but a patient with a history of cystic hygroma with normal karyotype must be counselled about the increased risk of recurrence in following pregnancies.

Keywords: Cystic hygroma, familial, hydrops fetalis, recurrent

[PP-201]

Evaluation of pregnancy outcomes according to the paternal age in in vitro fertilization cycles; retrospective analysis

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Objective: In last decades women and men are delaying marriage and parenthood to the mid or late thirties. After starting to use in vitro fertilization (IVF) widely, it is well established that the female's age is the main limiting factor of fertility and good reproductive outcomes. In some studies there is an age-related decline in daily sperm production, semen volume and motility. Herein, we aimed to evaluate the effect of paternal age on clinical pregnancy rate and live birth.

Material and Methods: Three hundred thirty-three fresh, non-donor ICSI cycles were retrospectively reviewed at the Dr. Zekai Tahir Burak Women's Health Training and Research Hospital in one year period. This study was approved by the institutional review board of the hospital.

Data were collected for IVF indication, cycle outcomes (2 pronuclei, fertilization rate, number of transferred embryo, clinical pregnancy rate and live birth rate) and sperm parameters. Patients were divided into two groups according to the paternal age (≤ 35 years and > 35 years) then two groups were compared for mentioned parameters. Recombinant (rec) FSH or human menopausal gonadotrophins (hMG) was used for ovulation induction. Flexible GnRH antagonist protocol was started when at least 2 follicles reached 13-14 mm and continued until Human chorionic gonadotrophin (HCG) administration for final oocyte maturation. Two embryos were transferred in patients > 35 years old and after second IVF cycle trials, legally. Clinical pregnancies were defined as those with fetal heart activity

Table 1. Comparison of the demographic characteristics, laboratory and pregnancy results of two groups according to the paternal age

Paternal age (year)	≤ 35 (n=242)	> 35 (n=91)	P value
Indication for IVF, n (%)			0.003
Male factor	126 (52.1)	44 (48.4)	
Unexplained	84 (34.7)	28 (30.8)	
Tubal factor	15 (6.2)	1 (1.1)	
Poor ovarian response	17 (7)	18 (19.8)	
2PN number	4 (2 ; 7)	4 (2 ; 6)	0.280
Fertilization rate (%)	66.7 (50 ; 80)	71.4 (50 ; 100)	0.028
Transferred embryo number, n (%)	n = 241	n = 91	
1 embryo	212 (87.6)	52 (57.1)	
2 embryo	29 (12)	39 (42.9)	
Clinical pregnancy, n (%)	87 (36)	33 (36.3)	0.958
Live birth, n (%)	69 (28.5)	26 (28.6)	0.992

The data were given as n (%), and abnormally distributed data were given as median (IQR 25; IQR 75). Bold values indicate the significance of p<0.05.

Table 2. Comparison of semen parameters of two groups according to the paternal age

Paternal age (year)	≤ 35 (n=126)	> 35 (n=44)	P value
Male factor			
Sperm concentration, million/mL	0 (0 ; 7)	7 (0 ; 11.75)	0.002
Motility, %	0 (0 ; 10.25)	5 (0 ; 18.50)	0.024
Kruger, %	0 (0 ; 2.25)	2 (0 ; 3)	0.004
TPMSC, million	0 (0 ; 1.65)	1.1 (0 ; 3.3)	0.006

The data were given as median (IQR 25; IQR 75).

documented on ultrasound examination at 3-4 weeks after embryo transfer. The data were analyzed with SPSS for Windows 20 package program. Abnormally distributed data were given as median (IQR25; IQR75). Chi-square test was used when comparing the groups. A linear regression analysis was performed. A p value of <0.05 was considered significant.

Results: Baseline, laboratory, and clinical parameters of the patients were given in Table 1. Although clinical pregnancy rate and live birth were same between the groups, the fertilization rate was higher (P = 0.028) in the older group. After linear regression analysis, it has been determined that the higher rate of the fertilization in older than 35 years old group to be caused due to the male factor. In this group all semen parameters statistically significant were better (Table 2). We believe that this situation is due to be mostly young male patients referred to our center for male factor.

Discussion: The current study was undertaken to evaluate the effect of paternal age during IVF cycles on pregnancy outcomes in a single tertiary center. Although the clinical and live birth were found similar in this study, the fertilization rate was higher in older than 35 years old group. This is a retrospective analysis of data including a small number of patients. Further prospective studies with more participants are required.

Keywords: Paternal age, IVF, clinical pregnancy rate, live birth

[PP-202]

Change in fetuin A levels in case of placental calcification at uncomplicated term pregnancies: Is there any underlying pathology?

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Objective: Fetuin A is a multifunctional protein and significant changes in fetuin A levels in some pathologic conditions were shown at previous studies. Although placental calcification at term is thought to be physiologic, it is not clear yet whether any underlying pathologic mechanism exist. In this study, we aimed to detect if there were any relationship or not between fetuin A levels and placental calcification at term.

Material and Methods: This study was designed as case-control study involving 57 Caucasian pregnant patients applied to Ankara Dr. Zekai Tahir Burak Women Health and Research Hospital, Turkey for routine pregnancy follow-up in between 37 to 41 gestational weeks of pregnancy from January 2014 to June 2014. Placental calcification was evaluated through ultrasonographic examination and classified through Granum classification. Case group consisted of 29 patients having grade III placental calcification. Control group consisted of 28 patients having non-calcified placenta. ELISA kit was used for serum analyses of fetuin A level. Mann-Whitney U, Chi-Square, Spearman's rho tests and Binary logistic regression analysis were used in statistical analyses.

Results: There was significant difference in maternal serum calcium levels between the case and control groups. However we did not found significant relationship between fetuin A levels and maternal serum calcium levels. We also did not found significant difference in fetuin A levels through our study groups.

Conclusion: Our study supported the thought that placental calcification at term should be the result of physiological process. Further studies may be designed on fetuin A levels in preterm placental calcification as preterm calcification may reflect placental dysfunction.

Keywords: Placental calcification at term, fetuin A

[PP-203]

Do serum progesterone levels on hCG administration day effect clinical pregnancy rate?

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Objective: The purpose of this study was to investigate the effect of progesterone (Pg) levels at the time of hCG administration on in-vitro fertilization (IVF) outcome, and to assess the role of luteinizing hormone (LH) in Pg elevation.

Material and Methods: A total of 105 patients admitted to our institution's IVF unit in a five month period were analyzed. Overall 28/105 cycles resulted in a clinical pregnancy and 77/105 cycles didn't result in a clinical pregnancy. Comparison between these two groups against a group of variables was performed: Patient age, body mass index (BMI), infertility etiology, basal hormones (Day 3), antral follicle count (AFC), treatment protocol, total gonadotropin dose and duration, Pg, LH and estradiol (E2) levels at the time of hCG administration. The relationship between Pg levels on the day of hCG administration and LH and E2 was analyzed.

Results: There were no statistically significant differences in age, BMI, basal hormones and AFC between the groups. Among these, 72 patients underwent long agonist protocol, 33 antagonist protocol. Non-pregnant women had similar Pg (0.73 (0.1-65) ng/mL vs. 0.73 (0.21-4.21) ng/mL) and E2 levels on hCG administration day compared with pregnant women (Table 1). In addition, there were no associations between Pg and LH levels on hCG day.

Conclusion: No significant relationship was found between Pg levels on hCG day and clinical pregnancy.

Keywords: IVF, progesterone on hCG day, luteinizing hormone, estradiol, clinical pregnancy

[PP-204]

Pre-pregnancy body mass index on adverse perinatal outcomes in adolescent pregnant women

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Objective: To evaluate the effect of pre-pregnancy body mass index on maternal and perinatal outcomes among adolescent pregnant women.

Material and Methods: In this prospective cross sectional study, we conducted with 365 singleton adolescent pregnancies (between aged 16-20 years) at a Maternity Hospital, between December 2014 and March 2015. We divided participants into two groups based on pre-pregnancy body mass index (BMI): Overweight and obese adolescent (BMI at or above 25.0 kg/m²) and normal weight (BMI between 18.5-24.99 kg/m²) adolescent. We used multivariate analysis to evaluate the association of the risk of adverse pregnancy outcomes and pre-pregnancy BMI.

Results: The prevalence of maternal overweight/obesity and normal weight was 34.6% (n=80) and 65.4% (n=261) in the study population, respectively. Compared with normal-weight teens (n=234), overweight/obese teens (n=71) were at higher risk for cesarean delivery (odds ratio [OR] 0.7, 95% confidence interval [CI] 0.4-1.4), preeclampsia (adjusted odds ratio [OR] 0.1, 95% confidence interval [CI] 0.02-0.9) and small of gestational age (odds ratio [OR] 0.2, 95% confidence interval [CI] 0.1-0.9).

Conclusion: Pre-pregnancy increased BMI could be an important preventable risk factor for poor obstetric complications in adolescent pregnancies and for these patients prevention strategies (e.g., nutritional counseling, weight-loss, regular physical activity) for obesity is recommended before getting pregnant.

Keywords: Adolescent pregnancy, increased body mass index, overweight and obesity, adverse perinatal outcomes

[PP-205]

Primary extraosseous Ewing sarcoma of the right infundibulo-pelvic ligament presenting with acute abdominal pain

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Extraosseous Ewing sarcoma (EES) is a rare soft-tissue tumor usually found in the extremities or paraaxial region, usually develops during childhood and young adulthood. We describe the case of a 44-year-old female with a large ruptured necrotic mass on the right infundibulo-pelvic ligament assumed as acute abdominal pain secondary to a degenerated subserous leiomyoma preoperatively. The frozen-section intraoperatively and final histopathological examination revealed an ESS of the infundibulo-pelvic ligament. EES in the gynecologic tract is extremely rare and to our knowledge this represents the first case report of EES originated from the infundibulo-pelvic ligament in English literature.

Keywords: Extraosseous Ewing sarcoma, infundibulo-pelvic ligament, abdominal pain

[PP-207]

Body mass index doesn't affect sperm concentration in infertile men

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Objective: Our aim in this study is to review the relation between body mass index (BMI) and sperm parameters in the male spouses of couples applying to our clinic with infertility complaints.

Material and Methods: The male spouses of 162 couples that applied to our clinic in a six-month period, due to infertility were incorporated into the study. The men included in the study were separated into two groups according to their BMIs; as obese (BMI ≥ 30 kg/m²) and non-obese (BMI < 30 kg/m²). Sperm parameters consisting of sperm concentration, progressive motility, Kruger morphology, semen volume, pH levels were evaluated. $p < 0.05$ value was accepted as statistically significant.

Results: A total of 162 patients who had applied to our clinic with symptoms of infertility were evaluated. 41 obese (BMI ≥ 30 kg/m²) and 121 non-obese (BMI < 30 kg/m²) men were eligible for the study. Table 1 depicts the demographics and clinical characteristics of the patients. No statistically significant difference was found for sperm quality among patients categorized according to the two BMI levels in terms of age and all semen parameters.

Conclusion: In our study; no significant difference was determined between the obese and non-obese groups, consisting of the male spouses of couples applying to our clinic due to infertility problems, in terms of sperm parameters. Further studies including a wider range of prospective cases are needed to be conducted on this issue.

Table 1. Comparisons of demographics and clinical characteristics

	Obese group; BMI >=30 kg/m² (n=41)	Non Obese Group; BMI <30 kg/m² (n=121)	p
Age (years)*	33 (25-54)	32 (22-52)	0.21
Sperm volume (cc)*	3 (1-5)	3 (1-8)	0.564
ph**	7.91±0.19	7.93±0.17	0.622
Concentration (mil/mL)*	15 (2-70)	43 (2-195)	0.15
Kruger (%)*	6 (2-13)	5 (3-9)	0.29
Progressive motility (%)*	18 (1-46)	32 (1-70)	0.07
*Values are median (minimum-maximum)			
**Values are mean±standard deviation			

Keywords: Body mass index, male infertility, obesity, sperm parameters

[PP-208]

The association of platelet indices and adverse neonatal outcomes in pregnancies complicated with preterm premature rupture of membranes

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Objective: To evaluate the association of platelet functions assessed by complete blood count (CBC) with adverse neonatal outcomes in pregnancies complicated by preterm premature rupture of membranes (PPROM).

Material and Methods: A retrospective case-control study was conducted. 50 patients in the study group those who admitted hospital because of PPRM and 50 healthy pregnant in the control group were included. All were at <=36 weeks of gestation. We searched for CBC and CRP results, birth weights of neonates, 1st and 5th minute APGAR scores, and neonatal intensive care unit admission. We analyzed whether there is a relationship between platelet indices measured by CBC and neonatal outcomes in PPRM. Shapiro Wilk test was used to assess normality of distribution. Variables were reported as mean±standard deviation or median values. Categorical variables were compared by Chi-square test. To estimate the sensitivity and specificity of PCT values for predicting RDS, receiver-operator curve (ROC) analysis was performed. Area under the ROC curve value with 95% confidence interval (CI) were reported. To determine the independent risk factors for RDS, binary logistic regression analysis with backward selection procedure was performed. The relationship among continuous variables were examined by using correlation analysis and Spearman correlation coefficient was computed. SPSS (IBM Corp.; Version 21.0. Armonk, NY, USA) and MedCalc, version 12.5 (MedCalc Software; Ostend, Belgium) were used for statistical analysis and the level of significance was set at $\alpha=0.05$.

Results: Compared to controls patients with PPRM had higher mean platelet volume (MPV) (mean 9.40 vs 10; $p=0.011$), plateletcrit (PCT)

(mean 0.19 vs 0.21; $p=0.032$) values and had a higher frequency of neonatal sepsis (18% vs 38%, $p=0.026$). We compared the CBC parameters, CRP values, 1st and 5th minute APGAR scores of patients in the study group according to the development of neonatal respiratory distress syndrome (RDS). We found increased PCT values in RDS group (0.23 ± 0.05 vs 0.21 ± 0.04 , $p=0.050$). In order to estimate the sensitivity and specificity of PCT values for predicting RDS, ROC analysis was performed and cut off point for PCT was determined as >0.22 . Logistic regression analysis revealed that the probability of RDS increased 5.86 times when PCT levels exceed 0.22 [odds ratio (OR)=5.86, 95% CI=1.01-32.01, $p=0.049$]. By logistic regression analysis it is also revealed that by one unit of increase in platelet distribution width (PDW) the risk of RDS increases 1.33 times [OR=1.33, 95% CI= 1.01-1.77, $p=0.048$].

Conclusion: In PPRM time passed until birth is a major risk factor for the maternal and neonatal infections which are the most serious complications. It is still controversial how the clinical management should be done. Appropriate waiting time is important to provide a favorable cervix and neonatal lung maturation. Earlier interventions results in failure of labor induction and increased C/S ratios. We found that MPV and PCT are significantly increased in PPRM and PCT >0.22 increased the risk of neonatal RDS 5.86 times. In this context these findings may be promising in the future to decide about the appropriate time for induction of labor.

Keywords: Adverse neonatal outcomes, platelet indices, preterm premature rupture of membranes

[PP-209]

Pregnancy outcomes in male adult-onset hypogonadotropic hypogonadism

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Objective: Male hypogonadism is characterized by androgen deficiency and infertility. The aim of this study was to investigate pregnancy outcomes of a cohort of male adult-onset hypogonadotropic hypogonadism patients after gonadotropin treatment.

Material and Methods: This retrospective study included 17 (age, 26 to 53 years) adult-onset hypogonadotropic hypogonadism patients presenting with azoospermia between 2011 and 2016. After baseline investigations, they started gonadotrophin therapy for 18 months. Basal follicle stimulating hormone (FSH), luteinizing hormone (LH), testosterone levels, pH of semen and pregnancy rate was recorded.

Results: These men were identified from a group of 2340 men referred to the Urology Unit at Zekai Tahir Burak Women's Health Training and Research Hospital for evaluation of azoospermia. Baseline serum levels of LH, FSH, and testosterone were 0.650 (0-8.7) IU/L, 0.07 (0-0.6) IU/L, and 131 (19-815) ng/mL, respectively. PH of semen was 7.79 ± 0.39 (6.5-8.0), volume of semen was 2.34 ± 1.46 (0.2-5) mL. Three patients were lost from follow-up. Two patients were divorced. 5 pregnancies occurred, including 2 natural conceptions and 3 in vitro fertilization (IVF).

Conclusion: Male adult-onset hypogonadotropic hypogonadism is one of the few treatable forms of male infertility.

Keywords: Male adult-onset hypogonadotropic hypogonadism, pregnancy, in vitro fertilization

[PP-210]

Case report: A late diagnosis; an unruptured 10 weeks tubal ectopic pregnancy

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An ectopic pregnancy is a pregnancy which occurs outside of the uterine cavity, and over 98% implant in the fallopian tube. Although abdominal pain and vaginal bleeding are the most common symptoms of ectopic pregnancy over 50 percent of women are asymptomatic before tubal rupture. Tubal ectopic pregnancy remains the most common cause of maternal mortality in the first trimester of pregnancy. The epidemiological risk factors for tubal ectopic pregnancy are well established and include: tubal damage as a result of surgery or infection (particularly Chlamydia trachomatis), smoking and in vitro fertilization. In this case report we aimed to inform you about an unruptured tubal ectopic pregnancy which had diagnosed at 10 weeks.

A 27 year old patient referred to hospital with pelvic pain. She is gravida 4 parite 3 had 2 times caesarean section and her menstruation has delayed about 2 months. She doesn't have vaginal bleeding. In the transvaginal ultrasound examination the endometrium was thin and there was crl 10 weeks fetus with fetal cardiac activity at right tube (Figure 1). No echogenic fluid was seen in the pelvic cul-de-sac. The laboratory tests were



Figure 1. Right tubal pregnancy in ultrasound image



Figure 2. Right tube and uterus

BHCG:38569 Hb: 11.7. Laparotomy was preferred due to hemorrhage risk. In the operation the ectopic gestation was located at ampulla and the unruptured right tube was enlarged as uterus (Picture 2). A right salpingectomy was performed. The patient was hospitalized for two days then she discharged and called for serial HCG measurement.

An ectopic pregnancy is an extrauterine pregnancy. Indications for surgical therapy include hemodynamic instability, suspicion of or risk factors for rupture, contraindications to methotrexate, or failed medical therapy. Salpingectomy is the standard procedure if the condition of the tube is ruptured, massive uncontrolled bleeding, or the gestation appears too large to remove with salpingostomy.

Keywords: Ectopic pregnancy, salpingectomy, tubal pregnancy

[PP-211]

Uterine smooth muscle tumor of uncertain malignant potential (STUMP): Clinicopathologic-sonographic characteristics, follow-up and recurrence

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Objective: STUMP is rare tumor, and it is regarded as sub-classification in uterine smooth muscle tumors between benign-malignant criteria. In this study, we evaluated characteristics of cases with STUMP diagnosis in 10-year period.

Material and Methods: We retrospectively evaluated medical records of patients with histopathologically STUMP diagnosis in İstanbul Training and Research Hospital, a tertiary center. We analysed preoperative demographic and clinical features and postoperative follow-up. Preoperative sonographic data has been reevaluated.

Results: The mean age was 42. One patient was postmenopausal, five patients were premenopausal. All of them had a complaint of menometrorrhagia. We reevaluated preoperative sonographic images of patients; and defined as 83.3% well-defined margins, 66.7% hyperechoic, 100% heterogeneous, 66.7% non-cystic, 50% calcification and 66.7% acoustic shadowing. Pathologic features; mean number of mitosis 8, mild atypia 66.7%, necrosis 33.3%. One patient, 24 years old unmarried woman with myomectomy, we detected recurrence of tumor in sonographic and MRI studies after 11 months, and confirmed the diagnosis via tru-cut biopsy. There was no relevance between sonographic findings and atypia, necrosis and mitosis. The recurrence was not in relationship with mitosis, degree of atypia and necrosis. We found no relevance between tumor diameter and mitosis, atypia, necrosis and recurrence.

Conclusion: STUMP is classified as an intermediate form, histopathologically so calling it benign or malignant for sure is not possible. Singularity, solidity, hyperechogenicity, heterogeneity and features of acoustic shadowing and margins can guide us to preoperative sonographic diagnosis. Recurrence/metastasis after many years from operation can be seen, and those patients should be followed long term.

Keywords: Uterine smooth muscle tumor, STUMP, sonography

Table 1. Case-based features

		Case 1	Case 2	Case 3	Case 4	Case 5	Case 6
Age		48	44	40	43	52	24
Gravida		12	8	2	4	7	0
Parity		5	6	2	4	4	0
Menopausal State		post	pre	pre	pre	pre	pre
Complaint		MM	MM	MM	MM	MM	MM+ Pelvic pain
Sonographic Findings							
	Number Of Tumor-Myoma	5	1	1	1	1	2
	Margins Of Tumor	ill-defined	well-defined	well-defined	well-defined	well-defined	well-defined
	Echogenicity	mixed	mixed	hyperechoic	hyperechoic	hyperechoic	hyperechoic
	Appearance	Heterogenous	Heterogenous	Heterogenous	Heterogenous	Heterogenous	Heterogenous
	Cystic Form	+	+	-	-	-	-
	Calcification	-	+	+	-	-	+
	Acoustic Shadowing	+	-	-	-	+	+
	Free Fluid	-	-	-	-	-	-
Pathology							
	Procedure	TAH BSO	TAH BSO	Myomectomy	TAH BSO	TAH BSO	Myomectomy
	Tumor Diameter (cm)	3.5	8	7	20	10	8
	Localization	Intramural	Submucous	Intramural	Intramural	Intramural	Intramural
	Number Of Mitosis (N/10 HPF)	4	17	8	5	8	6
	Atypia	mild	Moderate	Moderate	Moderate	mild	Moderate
	Necrosis	+	+	-	-	-	-
Recurrence		-	-	?	-	-	+

[PP-212]

Metastatic cervical carcinoma to the thyroid gland: A rare diagnosis

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Introduction: Cervical cancer is the third most common gynecologic cancer worldwide. Cervical cancer can spread via lymphatic or hematogenous dissemination. Lungs, liver and bones are generally affected by hematogenous dissemination. Thyroid gland is not a common site for invasive cancer metastasis despite rich vascular supply. Approximately 1.4%-3% of all thyroid malignancies are caused by metastasis. Clinical presentation can range from asymptomatic swelling in neck to endotracheal intubation for mechanical ventilation. Kidney, lung, breast tumors are most common source of thyroid metastases. Gynecologic malignancies are rare source of thyroid metastases, seen in only 3% of patients. In this case report, we present the case of a patient with advanced stage cervical cancer and thyroid metastases which cannot be diagnosed during preoperative imaging and laboratory studies.

Case Description: A 55-year-old G7P6 woman was admitted to our outpatient clinic with complaint of postmenopausal bleeding. In physical examination, nothing remarkable was found. Transvaginal ultrasonography showed 2 cm mass in isthmico-cervical junction with normal appearing adnexal structures. Endometrial sampling and endocervi-

cal curettage was performed and squamous cell carcinoma with focal keratinization was diagnosed. During preoperative evaluation her CA-125 level was 9.5 U/mL and thyroid-stimulating hormone level was 0.52 uIU/mL. Distant metastasis and local spread were evaluated with PET-CT scanning. PET-CT scan showed a metabolically active mass with in the junction of uterine corpus and cervix which considered to be compatible with primary malignancy but exact origin could not be distinguished. Thyroid gland abnormalities were also seen in PET-CT scan which consist of bilateral lobar hyperplasia with retrosternal elongation and metabolically inactive nodules the largest of 3 cm measured in both lobes. Patient was treated surgically and diagnosed with stage IIA squamous cell cervical cancer and pelvic lymph node metastasis. Adjuvant chemoradiotherapy followed surgical treatment. She admitted with a painless enlargement in thyroid gland causing dyspnea five months later from her surgery. Physical examination and thyroid ultrasonography were performed and only her TSH value was 0.02 uIU/mL. Thyroid auto-antibodies, FT3, FT4 values were all in normal limits. Diagnosis was multinodular goiter and total thyroidectomy was performed to relieve her symptoms. Surprisingly, pathologic and immunohistochemical evaluation of thyroid gland showed metastasis with squamous differentiation which was also identical to her treated cervical tumor. After recovery period, she is now taking her adjuvant chemotherapy which will be followed by neck irradiation.

Discussion: Metastatic carcinoma of the thyroid gland from cancer of the cervix is rarely seen in routine clinical practice. Nearly ten patient with thyroid metastasis from cervical cancer is reported in current literature in form of case reports. Generally metastatic disease cause no symptoms and diagnosed mostly in postoperative pathological examination of thyroid gland. Preoperative imaging studies showed thyroid gland enlargement in our patients but she was asymptomatic

and her thyroid function tests were all in normal limits because of this we were surprised with a metastasis in a thyroid gland five months later. In preoperative period, fine needle aspiration biopsy can be considered in these patients with a diagnosis of malignancy and thyroid gland abnormality.

Keywords: Cervical cancer, metastasis, fine needle biopsy

[PP-213]

Analysis of total laparoscopic hysterectomy operations in our clinic

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Objective: The purpose of this study was to evaluate the results of our experience with 58 patients who underwent total laparoscopic hysterectomy (TLH).

Material and Methods: The subjects included 58 patients operated in Eskisehir Osmangazi University School of Medicine, Department of Obstetrics and Gynecology. Total laparoscopic hysterectomies were performed for various indications between January 2014 and March 2016. Indications of total laparoscopic hysterectomy, method of operation, duration of the operation, intraoperative and postoperative complications, length of hospital stay, and blood loss, intraoperative or postoperative transfusion requirement in patients who underwent total laparoscopic hysterectomies were retrospectively evaluated.

Results: In total, 58 patients were included in our study. The mean age, parity and mean body mass index (BMI) was 48.4 years; 2.2 (0-5); 32.05±3.7 kg/m² respectively. The most common indication for total laparoscopic hysterectomy was myoma uteri (25.8%) and 10 patients (17.2%) underwent TLH due to gynecologic malignancies. The mean operation time was 93.6 (67-136) min, intraoperative complication rate was n=1 (bladder laceration) (1.7%), mean hospital stay was 2.9±1.09 days, and mean blood loss was 1.9 g/dL and one patient (1.7%) needed postoperative blood transfusion.

Conclusion: Total laparoscopic hysterectomy is the minimally invasive procedure that can be preferred for benign and malign gynecologic indications, especially for endometrial malignancies and have some important advantages including patient satisfaction, less analgesic requirement, early discharge from hospital, less complication about incision. After enough Training and experience total laparoscopic hysterectomy will be very safe and effective for patients.

Keywords: Total laparoscopic hysterectomy, minimally invasive surgery

[PP-214]

Female genital mutilation complication: Urethral coitus and infertility

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According to the definition of the World Health Organization (WHO), Female Genital Mutilation (FGM) comprises all procedures involving partial or total removal of the external female genital organs for non-medical reasons. It is estimated that there are approximately 100 million women who have been mutilated (circumcised) globally. There are numbers of complications with varying rates of frequencies particularly occurring as a result of mutilation such as: post-mutilation bleeding, infection, shock, menstrual irregularity, inability to urinate or frequent urinary tract infection, inguinal pain and difficulty in sexual intercourse. With this article, we aimed to discuss the complications developing as a result of genital adhesions depending on female genital mutilation of a female case who had undergone type 3 female genital mutilation when she was 8 years old, in the light of the literature.

Keywords: Infertility, urethral coitus, urinary incontinence, dysmenorrhea, sexual dysfunction



Figure 1. After female genital mutilation urogenital appearance before operation



Figure 2. Normal vaginal anatomic appearance after operation

[PP-215]

The relationship between novel inflammatory markers and hyperemesis gravidarum

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Objective: Hyperemesis gravidarum (HG), also known as nausea and vomiting of pregnancy or morning sickness, is an important and common obstetric problem in worldwide. However, the etiology of HG is not clearly defined; inflammation is known to have a critical role in etiopathogenesis of HG. Systemic inflammation can be measured by using haematological markers such as the neutrophil to lymphocyte (NLR) and platelet to lymphocyte (PLR) ratios. In the literature, several studies have explored the diagnostic and prognostic value of NLR and PLR in pregnant women with preeclampsia, gestational mellitus, acute appendicitis and acute pancreatitis. The aim of the study was to investigate the role of novel inflammatory markers, NLR and PLR, in patients with HG.

Material and Methods: This retrospective study was performed in Bursa Yüksek İhtisas Research and Training Hospital, Department of Obstetrics and Gynecology between January 2015 and December 2015. The diagnosis criteria of HG as follows: severe vomiting (more than 2 times in 24 hours), presence of at least +1 ketonuria in spot urine examination and weight loss more than >5% of total body weight. The study population consisted of 433 pregnant women with HG and 160 pregnant women without complaints matched for gestational age as a control group. Demographic features, obstetric history (gravida, parity, gestational age), number of vomiting were recorded from patients file. Moreover, neutrophil, lymphocyte and platelet counts from complete blood count, blood lipids, liver enzymes, keton positivity in urine analyses were recorded. NLR and PLR were calculated by dividing the absolute neutrophil count or the absolute platelet count, respectively, by the absolute lymphocyte count. NLR and PLR were compared between HG and control group. Statistical analyses were performed using SPSS version 21 (SPSS Inc.; Chicago, IL, USA). A p value <0.05 was considered statistically significant.

Results: The baseline demographic data and laboratory parameters were summarized in Table 1. There was no significant difference between the groups in terms of demographic and clinical characteristics. The groups did not significantly differ with regard to lipid profiles, liver enzymes and electrolytes ($p>0.05$). NLR and PLR were significantly higher in pregnant with HG compared to healthy pregnant women ($p<0.05$).

Conclusion: We demonstrated an increased NLR and PLR in the setting of HG. They are inexpensive, easy to use and practical haematological markers which can be used to predict presence of HG.

Keywords: Hyperemesis gravidarum, neutrophil to lymphocyte ratio, platelet to lymphocyte ratio

Table 1. Demographic data and laboratory parameters of patients

	HG (n: 433)	Control (n: 160)	p
Age (years)	26±5.5	25±5.4	0.26
BMI (kg/m ²)	26.8±2	27.4±2	0.86
Parity (number)	2 ± 1.2	2±1.3	0.10
Gestational Age (week)	9.9±3.3	10±3.5	0.38
Triglyceride (mg/dL)	155.2±39.8	148.9±37.7	0.07
Total Cholesterol (mg/dL)	193.6±35.7	190.8±35.1	0.40
HDL (mg/dL)	47.5±7	47.3±7.2	0.66
LDL (mg/dL)	111.6±20.6	113.5±18.1	0.31
AST (U/L)	18.6±6.2	17.8±5.1	0.17
ALT (U/L)	17.1±8	15.8±8.9	0.09
Na (mmol/L)	136.9±2.1	137.1±2.1	0.23
K (mmol/L)	4.04±0.39	4.09±0.45	0.22
Neutrophil to lymphocyte ratio	3.65±1.56	2.92±0.84	<0.05
Platelet to lymphocyte ratio	138.42±53.3	108.1±29.1	<0.05

ALT: alanine aminotransferase; AST: aspartate aminotransferase; BMI: body mass index; HDL: high density lipoprotein; K: potassium; LDL: low density lipoprotein; Na: sodium

[PP-216]

Don't forget Behcet's disease at the differential diagnosis of cervical ulcers

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A large number of women suffer from genital ulcer, and its differential diagnosis can be difficult. Genital ulcer may be present in sexually transmitted diseases such as genital herpes, syphilis, chancroid, lym-

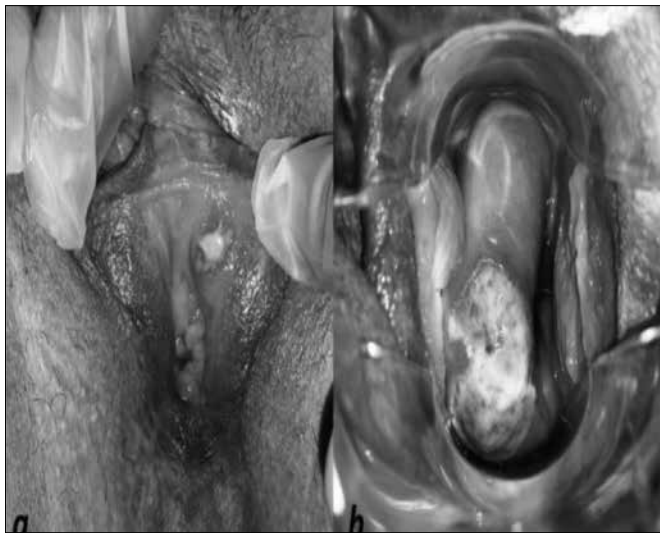


Figure 1. a, b. Ulcer inside of the left labia minora (a), cervical ulcer (b)

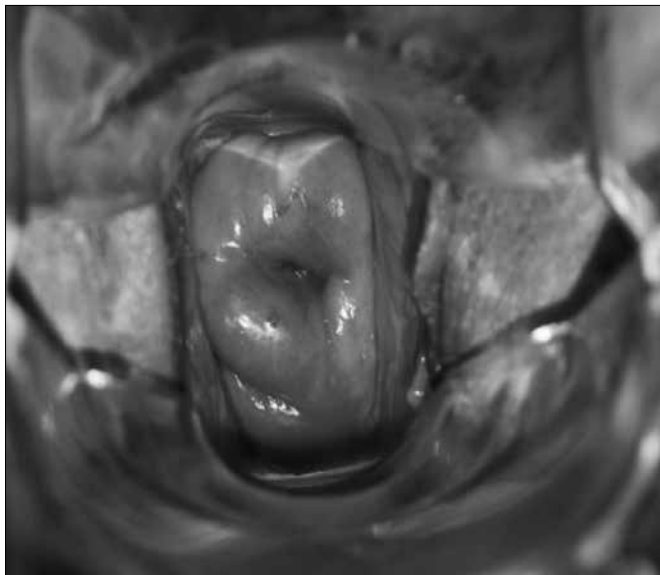


Figure 2. The cervix after the treatment for Behcet's disease

phogranuloma venereum donovanosis, or some chronic disorders such as Behcet's syndrome, paghet's, pemphigus, erosive lichen planus and Crohn's disease. Behcet's disease (BD) is a systemic inflammatory disease with unknown etiology. There is no diagnostic test for BD, and its diagnosis mainly relies on clinical criteria. It is characterized by recurrent painful oral and genital ulcers, skin lesions, and relapsing eye involvement. Genital ulcers are second common lesions and occurs in 57%–93% of BD. Genital ulcers may cause severe pain and affect patients' quality of life. In women, ulcers most commonly seen on the labias, but it should be in mind that vaginal and cervical ulcers may occur in BD and they may be associated with excessive vaginal discharge. The incidence of cervical ulcers are not specified exactly in the literature. Deep ulcers in vagina may cause bladder or urethral fistulae. Vulval ulcerations also may led to labial destruction. In this case we present a 40-years-old multiparous woman applied to gynaecology clinic with painful lesion in the genital area. She had sometimes painful oral aphthous for along 4-5 years but she had the genital ulcer recently. She did not refer to any hospital for them before. In physical examination a painful ulcerative lesion approximately 0.8 cm in diameter was observed inside of the left labia minora (Figure 1a). In speculum examination, a large ulcerative lesion approximately 3x4 cm in diameter was seen on the cervix (Figure 1b). Cervical screening was performed with conventional PAP-smear. She has no complaints of bleeding, malodorous or plenty vaginal discharge. PAP-smear revealed benign inflammatory changes. The patient was referred to the rheumatology clinic with the suspicion of Behcet's disease. Behcet's disease was the final diagnosis. Since she had associated signs such as erythema nodosum and arthralgia, medical treatment was given. After 9 months treatment, the cervical ulcer was completely recovered in the vaginal speculum examination (Figure 2).

Keywords: Cervix, ulcer, Behcet's disease

[PP-218]

A case report of sirenomelia diagnosed during the first-trimester screening

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Objective: Sirenomelia is a rare congenital deformity characterized by abnormal development of caudal area of the body. It is considered to be the most severe form of caudal regression syndrome. Sirenomelia is found in one out of every 60000-100000 live births. This condition is characterized by fusion in lower extremities and atrophy along with severe urogenital and gastrointestinal malformations. Renal agenesis or dysgenesis, sacral agenesis, vertebral defects, imperforate anus and absence of rectum, absence of internal and external genitalia, oligohydramnios and vascular abnormalities can be associated. This anomaly usually is diagnosed in the third trimester or after birth. Very few cases diagnosed have been reported before the second trimester. In this study, we aimed to discuss a case that was diagnosed antenatally in the 12th week of pregnancy by ultrasonography and to review the literature.

Material and Methods: We examined the patient by ultrasonography referred for the first trimester screening.

Results: A 30-year old patient, G:10 P:6 Y:6 A:3, was pregnant for 12 weeks according to her last menstrual period. She and her husband

are not relatives. Her six children were alive and had no congenital anomalies. Crown rump length (CRL) was compatible with 12 weeks. The fetal heartbeat was positive and there was prevalent edema under the scalp. The nuchal translucency (NT) was measured as 7 mm. Septated cystic mass was observed in the neck region. The heart, liver, small intestine and urinary bladder were bulging out through anterior abdominal defect. The single umbilical artery was observed. Two lower extremities were united as a single extremity and in that extremity total 3 bones were observed. There was syndactyly of both hands. After termination of pregnancy, during macroscopic examination of fetus, it was observed that both lower extremities were fused, there was only two femoral bones and one tibia and the feet were opened toward two opposite directions. The heart, intestines, liver and bladder were located out of the abdomen. Syndactyly between all fingers of the right hand and between the third, fourth, fifth fingers of the left hand were present. Direct graphy of fetal skeleton could not show the bony structure due to underdeveloped fetus. Sampling was performed for chromosomal analysis; however, no growth in culture was seen.

Conclusion: In our case, this anomaly has been detected in the first trimester at the 12th week of pregnancy during an NT scan and the pregnancy was terminated upon the family's request. Although much less common, the sirenomelia can be diagnosed during the first trimester screening.

Keywords: Congenital anomalies, sirenomelia

[PP-219]

The impact of Assisted-Reproductive Technique (ART) on Crown-Rump Length (CRL)

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Objective: We aimed that comparing the difference between the gestational week calculation with the embryo transfer date and with the calculation of CRL in the pregnancies consequence of ART cycles. So we can evaluate the impact of ART like a environmental factor on early term on fetal growth.

Material and Methods: The medical records of 78 patient cases (46 spontaneous and 32 ART cycle pregnancies) which applied for the combined scanning test on the 11-13th weeks of their pregnancies to the Dokuz Eylül University Hospital, are evaluated retrospectively. The gestational week calculations are obtained by using the last menstrual period date for the spontaneous pregnancies and with the embryo transfer date and the embryo age in the ART cycle pregnancies. The difference between the results of the CRL measurement and the estimated values for the gestational week calculation is carried out. We use Chi-Square test and Fischer-Exact test in the categorical variables. For the numerical variables we apply the t-test in the independent groups and Mann-Whitney U test with (SPSS-15)(accepted statistically significant for $p < 0.05$) in the groups which are not normally distributed.

Results: The age average of ART group (31.9 ± 3.8) is higher than the spontaneous group (28.1 ± 4.7), with ($p < 0.001$). Among the studied

cases, there is no significant difference between the gestational week calculations which are obtained by using the last menstrual period date (12.1 ± 0.5 weeks in the spontaneous pregnancies and 12.2 ± 0.6 weeks in ART cycle pregnancies) and the CRL measurement (59.9 ± 7.4 mm in the spontaneous pregnancies and 61.1 ± 6 mm in the ART cycle pregnancies), ($p = 0.53$). When we compare the results of the CRL measurement and the estimated values for the spontaneous and the ART cycle pregnancies, there is also no significant difference in between. ($p = 0.53$). Besides, the biochemical markers (PAPP-A and B-hCG) indicates no significant difference between these groups, with ($p = 0.59$ and $p = 0.57$) respectively.

Conclusion: In some studies, it is claimed that the hormonal stimu-



Figure 1. Sirenomelia 1



Figure 1. Sirenomelia 2

Table 1. The epidemiological characteristics, first trimester cml calculations and biochemical markers of the patients that included to the study and the calculated gestational week differences

	Spontaneous N (%) 46(59%)	ART N (%) 32(41%)	p
Age (Year)	28.1±4.7	31.9±3.8	<0.001
Weight (kg)	62.4±12.6	68.9±12.4	0.02
Gestational Week (week)	12.1±0.5	12.2±0.6	0.52
CRL (mm)	59.9 ±7.4 mm	61.1±8.6 mm	0.52
Smoking	8(17.3)	0	0.01
PAPP-A (MoM)	0.93 (0.16-1.90)	0.91 (0.17-2.55)	0.59
B-hCG (MoM)	0.92 (0.27-4.33)	1.19 (0.53-9.33)	0.57
Gestational Week Difference (week)	0.10 (-0.5-0.2)	0.10 (0.5-1.6)	0.53

lation therapies used in ART cycle and the medium in which embryo reserved have some effects on the early fetal growth. In addition, compare to the spontaneous pregnancies, the difference of gestational weeks according to the first trimester CRL calculations is more in the ART cycle pregnancies. In our research, we do not find a significant difference between the gestational week calculations in the ART cycle and the spontaneous pregnancies. Furthermore, we do not find a meaningful difference between the biochemical markers in two groups.

Keywords: Assisted-Reproductive Technique, B-hCG, Crown-Rump Length, Gestational Week, PAPP-A

[PP-221]

An unusual complication after adnexal torsion operation

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Objective: Torsion of adnexal structures is a relatively rare gynecologic emergency which is usually encountered in reproductive age women. It can present with complications of peritonitis, abdominal bleeding and can cause loss of ovarian reserve. In this report we discuss an unusual case of adnexal torsion who developed generalized edema after the surgery.

Case: A 33 years old woman with primary infertility diagnosis was presented to our outpatient clinic with pelvic and lower abdominal pain. She had a history of intrauterine insemination procedure following ovulation induction with clomiphene citrate one month prior to her presentation. Her past medical and surgical histories were unremarkable. She was recalling that her pelvic pain began acutely on the 4th day of her menstrual cycle. A pelvic ultrasound exam revealed an enlarged right ovary with dimensions of 64x36x31 mm and normal appearing left ovary. Blood flow to both ovaries was reported normal initially on pelvic computerized tomography however following Doppler ultrasound evaluation indicated absent venous and arterial blood flow to right ovary. With severe abdominal pain on palpation, rebound ten-

derness and Doppler findings, patient was taken to operating room for suspected adnexal torsion. During the surgery, the left ovary and uterus appeared normal; however right adnexal structures were twisted and were in bluish discoloration. The right ovary was enlarged secondary to discontinued blood flow and edema. Ovarian edema and discoloration immediately subsided following the untwisting of affected adnexa and operation was discontinued. On the first postoperative day, patient was complained of abdominal distention. Complete blood count and biochemical profile for liver enzymes, renal function tests, serum glucose, sodium, potassium, calcium, and chloride levels were in their normal range. Abdominal ultrasonography was normal except pelvic and abdominal ascites. On the second postoperative day patient reported dyspnea and vague chest pain. While basic cardiac evaluation was found to be normal, chest X-ray revealed marked bilateral pleural effusions on basal segments. After 48 hours of starting diuretic treatment, patient's complaints were completely resolved and she was discharged from the hospital on the 5th postoperative day in stable condition.

Conclusion: Among several complications of adnexal torsion, generalized edema is rarely reported. We encountered this complication even though there was no reason for iatrogenic fluid overload. It has been shown that certain cytokines such as tumor necrosis factor-alpha and interleukin 6 (TNF-a, IL-6, respectively) levels are increased in cases with adnexal torsion. It is plausible that these cytokines caused increased vascular permeability and led to this complication in our case too. Although unusual, generalized edema complication must be kept in mind in managing adnexal torsion cases.

Keywords: Adnexal torsion, fluid accumulation, edema

[PP-222]

Isolated fetal hepatic calcification associated with trisomy 21 in the third trimester

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Introduction: Isolated fetal hepatic calcification may be detected co-incidentally and its clinical importance is not clearly identified. Its isolated form is seen more frequently, however it may be accompanied by aneuploidy, maternal TORCH infections and maternal/fetal cystic fibrosis. Hepatic calcifications are seen more often in recent years due to improved visualization techniques and increased fetal follow up. In the present case we have identified hepatic calcification in a patient in the third trimester. Karyotyping has revealed trisomy 21 after screened for the other etiology of hepatic calcification concluded negative. Hepatic calcification is not minor sonographic findings of trisomy 21; therefore we have aimed to report this case.

Case: Multiple fetal hepatic parenchymal calcifications with the largest diameter of 6 mm have been visualized in a patient at 32 weeks gestation (Figure 1). Detailed ultrasonography showed no other anomaly. Fetal echocardiography showed no cardiac malformation. Maternal syphilis, cytomegalovirus, herpes virus 1-2, rubella, toxoplasma, parvovirus B19 and parental cystic fibrosis mutations were screened for the etiology of hepatic calcification and all resulted negative. Karyo-

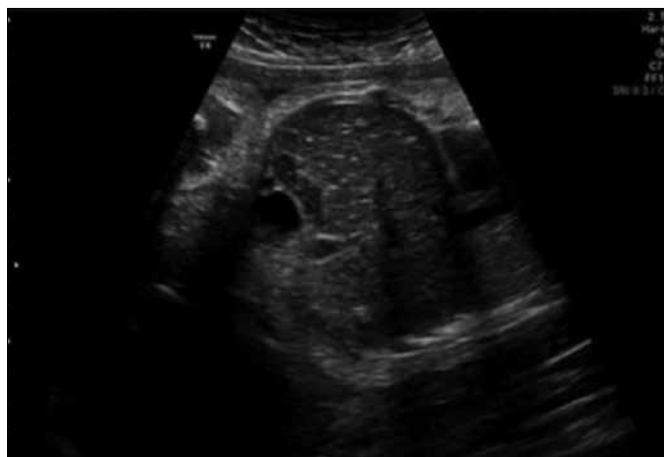


Figure 1. Multiple fetal hepatic parenchymal calcifications

typing was offered to the family to rule out fetal aneuploidy and the result was trisomy 21. The family was given genetic counseling. The fetus was monitored weekly and there was no change in the dimensions of the calcifications in the follow-up. At term a 3250 g male fetus was delivered vaginally and referred to the pediatricians.

Discussion: The incidence of fetal hepatic calcifications is found as 1/1750 in a series of pregnancies at 15-26 weeks. Isolated calcifications are seen more frequently, however additional fetal anomalies should be evaluated sonographically and maternal infections, especially CMV and varicella should be evaluated as well. Calcifications may be in the parenchyma, intravenous or as peritoneal punctuations as one or multiple lesions. Infections, ischemia, portal/ hepatic venous thromboembolism, hepatic tumors and gall bladder stones may also form calcifications. The clinical importance and prognosis in isolated forms is still unclear. Fetal hepatic calcifications seem to be harmless in normal karyotype and infection negative fetuses. However, Simchen et al have reported fetal karyotype anomaly, especially trisomy 13 in 11 out of 61 patients with hepatic calcifications. In the presence of accompanying fetal anomaly, karyotyping is indicated. Fetal chromosomal abnormalities should be kept in mind presence of hepatic calcifications with evaluating other possible etiological factors is resulted negative.

Keywords: Chromosome abnormality, fetal hepatic calcification, fetal ultrasound, prenatal diagnosis

[PP-224]

Evaluation of hs-CRP and visceral adiposity index by clinical and laboratory findings in patients with polycystic ovary syndrome

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Objective: PCOS is an endocrine-metabolic disease whose relation with long-term health problems such as diabetes mellitus and coronary artery diseases has been well-known. Insulin resistance and hyperinsulinemia result in hyperandrogenemia. Those two also cause a low grade inflammation by increasing C-reactive protein (CRP), interleukin-6, leukocyte count and other inflammatory markers. CRP is a marker for cardiovascular risk and high sensitive CRP (hs-CRP) is more sensitive than CRP. In this study, we aimed to evaluate hs-CRP and visceral adiposity index combined with clinical and laboratory findings in patients with polycystic ovary syndrome.

Material and Methods: Seventy five patients who were admitted with complaints of absence of menstruation, hirsutism or increased body-weight to Mustafa Kemal University Obstetrics and Gynecology outpatient clinic and diagnosed as PCOS according to the criteria of Androgen Excess and PCOS Society 2006 were enrolled to this study. Seventy five healthy women were also included as control group. Patient and control groups each were further divided into 2 as obese whose body mass index (BMI) was ≥ 25 and non-obese whose BMI was < 25 . Physical examination and ultrasonography were performed. Levels of fasting blood glucose, fasting insulin, HbA1c, lipids (total cholesterol, HDL cholesterol, LDL cholesterol, triglyceride), hs-CRP, estradiol (E2), follicle stimulating hormone (FSH), luteinising hormone (LH), thyroid stimulating hormone (TSH), prolaktin (PRL), total testosterone and sex hormone binding globulin (SHBG) were tested as well as hs-CRP and VAI.

For data analysis, 'Statistical Package for Social Sciences (SPSS) 13 for Windows' programme was used. Kolmogorov-Smirnov Z test, Mann-Whitney U test and Ki-square test were applied. For statistical significance $p < 0.05$ was determined. Findings were presented as median (minimum-maximum).

Results: No statistically significant difference was found between PCOS group and control group concerning hs-CRP ($p = 0.065$) and VAI ($p = 0.370$). When patients in PCOS group were further grouped as obese and non-obese, hs-CRP and VAI values in obese group were significantly higher than those in non-obese group ($p < 0.001$) (Figure 1). However, when control group were further grouped as obese and non-obese, there was no significant difference between groups in terms of hs-CRP ($p = 0.093$). VAI values were significantly higher in obese control group ($p = 0.002$) (Figure 2).

Conclusion: While hs-CRP and VAI are significant parameters to determine metabolic components and predictive risks for cardiovascular diseases in patients with PCOS, hs-CRP stands for a better and more specific marker comparing to VAI. Long-term studies are needed in order to determine cardiovascular risks particularly in young PCOS patients.

Keywords: Cardiovascular disease, hs-CRP, PCOS, visceral adiposity index (VAI)

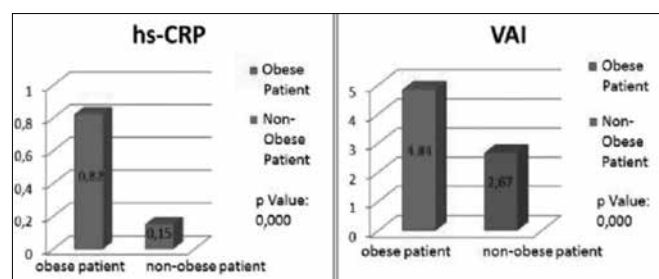


Figure 1. Comparison of hs-CRP and VAI values of obese and non-obese cases in PCOS group

[PP-225]

Inutero atresia of the urethra without oligohydramnios: A case report

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Background: Atresia of the urethra is a rare congenital bladder outlet obstruction that is usually fatal. Prevalence is unknown, but is higher in males than females. Atresia of urethra often presents on routine antenatal ultrasound with oligohydramnios or anhydramnios, urinary ascites and megacystis and may cause fetal death. In rare cases, there is an abnormal opening between the bladder and the rectum which may allow the urine to drain. This is a case of inutero atresia of the urethra without oligohydramnios.

Case: A 28-years-old, gravida 1, parity 0 pregnant women was referred to our antenatal clinic at 19 weeks of gestation. There were not maternal medical illness, drug and substance abuse or family history. First - trimester blood tests, nuchal translucency test and second - trimester AFP MoM value were normal. Alive and singleton female fetus was detected with ultrasonographic examination. There were no oligohydramnios. The bladder size was 27*14 mm, antero - posterior diameter of the left kidney was 7 mm and antero - posterior diameter of the right kidney was 9 mm. "The keyhole view of the bladder" were identified. The fetal growth was normal and no associated anomalies were detected. Amniocentesis was performed and the fetal karyotype was normal (46, XX). The urinary decompression with a vesico -amniotic shunt procedure was explained to parents but they refused this procedure and they selected termination of pregnancy. After perinatology council decision, the pregnancy was terminated at 22 weeks of pregnancy. The autopsy results were consistent with urethral agenesis without other anomalies.

Conclusion: Atresia of the urethra rarely seen without additional abnormalities and oligohydramnios. The only significant finding may be megacystis. Fetal karyotype is usually normal in patients with large diameter of the bladder (>7 mm).

Keywords: Atresia of the urethra, megacystis, oligohydramnios, urinary ascites



Figure 1. Fetal megacystis at longitudinal plane



Figure 2. The keyhole view of the bladder at longitudinal plane

[PP-227]

A rare clinical case of primary retroperitoneal dermoid cyst during pregnancy

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Objective: The dermoid cyst or mature cystic teratoma is the most common ovarian neoplasm type, accounting for nearly 20% of all adult ovarian tumors. They occur most commonly in the ovary, although cases of diverse anatomic locations including the fallopian tube, uterus, rectum and omentum have been reported. Primary retroperitoneal teratomas are rare and occur mostly in the sacrococcygeal areas of children. They constitute less than 4% of all extragonadal teratomas with less than 120 cases having been reported, and only partly described in the retroperitoneum of adults. We describe an unusual case of a retroperitoneal mass with ischiorectal fossa extension in a woman who had a 20 week's of gestation.

Case: A 21-year-old Syrian woman gravida 2, para 1 was admitted with the complaint of vaginal bleeding and abdominal pain. Routine abdominal sonogram showed a 10.9×12.6×20.9 cm septated cystic pelvic mass in the posterior cul-de-sac and non viable 22 week's of gestation. There was a small amount of free fluid in the cul-de-sac. On the vaginal examination we did not reach to the cervix of the uterus, we palpated mass in the posterior fornix of the vagina. We decided to perform exploratory laparotomy. At the time of laparotomy the uterus, both of the ovaries and pelvic peritoneum were observed as normal and there were no signs of endometriosis, infection or adhesions. A mass of 10×15 cm in diameter located retroperitoneal, under the posterior cul-de-sac was recorded. This mass was adhered with dense adhesions to the sacrum. Macroscopically, the lesion was an 10×15 cm,

cystic mass through the levator-ani muscle, filled with sebaceous material and hair. Histologic examination revealed a typical benign cystic teratoma involving adipose tissue, and sebaceous glands. Hysterotomy was performed and one male ex fetus was delivered. The cyst was aspirated and parsiyel cystectomy was performed. Total excision was avoided after intraoperative neurosurgery consultation and he explained that possible sacral nerve fibers within the lesion may be injured from total excision. Beside this general surgeon also intraoperatively evaluated the case and warned about intractable bleeding from sacral venous plexus.

Conclusion: Retroperitoneal teratomas are rare and difficult to early diagnose because of non specific signs and symptoms. Extension of these lesions into the spinal canal is more rare. Solid and cystic morphology, fatty signals and areas of calcification are some of the helpful features in diagnosis this neoplasia. Once the diagnosis is made, surgical removal is inevitable because of the unstable course of the disease. Prognosis depends on the histologic nature of teratoma. Patients with complete resection of benign teratoma have an excellent prognosis.

Keywords: Retroperitoneal dermoid cyst, pregnancy

[PP-238]

Comparison of serum YKL-40 and ischemy modified albumin (IMA) levels between pregnant with hyperemesis gravidarum and normal pregnant

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Objective: Aim of this study is to compare the levels of YKL-40 protein as an inflammatory marker and IMA as an oxidative marker among pregnant with hyperemesis gravidarum and normal pregnant

Material and Methods: Study was designed as a case-control study, between April 2015-December 2015. Totally 35 pregnant, healthy and with hyperemesis gravidarum, were included to study. Pregnants between 6+0 week and 13+6 weeks of gestation, singleton pregnancy, with normal fetal anatomy, no chronic use of drug and concomitant medication were included to study. Demographical data (age, gravidity, parity, abortion and curettage), complaints, weight and height, crown-lump length measured sonographically, weight loss during pregnancy, previous pregnancy history of the all pregnant were recorded. Complete blood count, complete urine analysis, biochemical tests and thyroid function tests were taken. All blood samples of the pregnant who were included to the study which taken to non-heparinized tubes were centrifuged. Centrifuged blood samples were stored at - 20°C. After reaching adequate case and control patient number blood samples were melt to room temperature and measured by commercial instant kits. All data used for statistical analysis, p<0.05 was considered significant.

Results: There was no significant demographical feature (age, gravidity, gestational age, body mass index) difference between cases. Blood

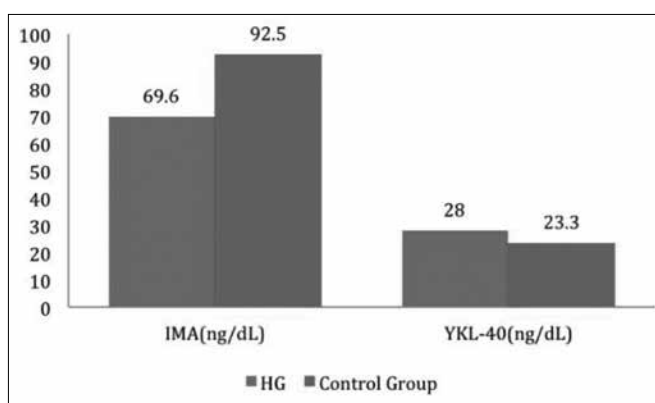


Figure 2. The keyhole view of the bladder at longitudinal plane

Table 1. Cross table of Smoking-Group

Smoking	Group		Total (n=70)
	HG (n=35)	Control group (n=35)	
Smoker	3 (%8,6)	8 (%27,9)	11
Not smoker	32 (%91,4)	27 (%77,1)	59
Total	35	35	70

urea nitrogen (BUN), creatinine and potassium levels were higher among pregnant with hyperemesis gravidarum but this was not statistically significant. No statistical significant difference was detected at IMA levels between the groups ($p>0.05$). Median level of YKL-40 was higher among pregnant with hyperemesis gravidarum but there was no statistical difference ($p>0.05$). It has been evaluated the impact of smoking history and previous parity. The incidence of nulliparity and not smoking is higher in hyperemesis gravidarum group but there was no statically significant difference $p=0.103$ (Chi-Square test). Despite of high percentage of nulliparity and being non-smoking there was no significant statistical difference ($p=0.220$, $p=0.103$ respectively).

Conclusion: More comprehensive studies with more number of patients needed to prove the efficacy of YKL-40 and IMA levels in order to predict hyperemesis gravidarum and even early planning of the treatment

Keywords: Hyperemesis gravidarum, ischemia modified albumin, YKL-40, oxidative stress, inflammation

[PP-239]

Before Amniocentesis you need more than Advanced Maternal Age

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Objective: Among prenatal diagnostic tools, amniocentesis is the most commonly performed invasive diagnostic method to detect genetic disorders; however, it is not a routine procedure. Previously amniocentesis was offered to women at increased risk of fetus to have aneuploidy, primarily women who will have been 35 years or older when they deliver. The aim of this study is to report the results of diagnostic amniocentesis over 35 years old women.

Material and Methods: Medical records of 1632 pregnant women who underwent genetic amniocentesis between the 2006-2014 years were reviewed retrospectively. Those pregnancies were examined by ultrasound (US). Echogenic foci in the heart, echogenic bowel, mild pyelectasis (A-P diameter >4 mm), thickened nuchal fold (>5 mm), shortened femur and humerus (Adjusted by Biparietal Diameter) and absent nasal bone were soft markers for ultrasound. Also major structural anomalies were noted. We designed 3 study group. First group includes the 1239 patients who had no screening test, normal US findings and underwent amniocentesis because of only advanced maternal age. Second group includes 325 women who had high risk on second trimester screening test and the third group includes 67 women who had not only advanced maternal age but also ultrasonographic markers. Fetal karyotyping was performed by in-situ technique and same genetic team.

Results: 1632 genetic amniocentesis were performed. In the 1st group 22 of 1239 in the 2nd group 14 of 325 and in the 3rd group 10 of 67 samples resulted abnormal chromosomal configuration. We used Pearson Chi-square tests for statistical analyzes to compare these groups.

Conclusion: Advanced maternal age used as a single indication to perform genetic amniocentesis in the seventies. In both 2007 and 2016 guidelines ACOG does not recommend to use maternal age as a sole indication for invasive genetic testing. Ability to detect aneuploidy increases with positive serum screening, presence of soft ultrasound markers or both. All women should be offered the option of screening or diagnostic testing for fetal genetic disorders, regardless of maternal age. At the time of counseling regarding aneuploidy screening, the benefits and risks of diagnostic tests should be discussed by details and all aspects. Maternal age should not be a single determinant for the decision to do invasive diagnostic test.

Keywords: Amniocentesis, advanced maternal age, ultrasonographic markers

[PP-242]

Soft markers for aneuploidy and second trimester screening

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Objective: Ultrasound (US) has been used for every steps of prenatal diagnosis and pregnancy follow-up. US exam provides data about determination of gestational age, structural anomalies, screening for various high risk pregnancy conditions in both low and high risk population. Soft markers have been used for risk adjustment after second trimester aneuploidy screening. The aim of this study is to report the

amniocentesis results of high risk Down screening and co-existed soft aneuploidy markers between 2006 and 2014.

Material and Methods: Medical records of pregnant women who underwent genetic amniocentesis between the 2006-2014 years were reviewed retrospectively. All ultrasound exams were performed by two operator. Echogenic foci in the heart, echogenic bowel, mild pyelectasis (A-P diameter >4 mm), thickened nuchal fold (>5 mm), shortened femur and humerus (Adjusted by Biparietal Diameter) and absent nasal bone were soft markers for ultrasound. Fetal karyotyping was performed with in-situ technique by same genetic team (Table 1).

Results: 3550 genetic amniocentesis were performed by various indications. At least one soft marker was detected in 171 of screen positive by biochemistry (second trimester screening) from 3550 patient by ultrasound. From the five of 171 pregnancy had abnormal cytogenetic results. Karyotype was not obtained from one of 171 pregnancies because of the culture failure, chromosomal abnormality and for one patient the genetic laboratory couldn't analyze the sample. Clinical features of five aneuploid pregnancies were shown (Table 2).

Conclusion: Various ultrasonographic markers were defined as a co-incidental ultrasound findings for fetal aneuploidies two decade ago. They used for the adjustment for the second trimester screening test results by

Table 1.

Soft Markers	N=171
Echogenic Bowel	88/171
Choroid Plexus Cyst	49/171
Echogenic Cardiac Focus	24/171
Unilateral Pyelectasis	10/171
Bilateral Pyelectasis	20/171
NT >5 mm	5/171
Edema in Fetal Subcutaneous	1/171
Hypoplasia in 5 th finger of hands	1/171
Single Umbilical Artery	3/171
Short Femur Length	1/171
Pes Equinovarus	2/171

Table 2.

Case	Age	Week of Gestation	Feature	Signs	Results
Case 1	28	17 High Risk	Second Trimester Screening	Thickened nuchal fold	Mosaic Turner
Case 2	34	17 High Risk	Second Trimester Screening	Multiple echogenic foci in right ventricle	T13
Case 3	32	18 High Risk	Second Trimester Screening	Echogenic bowel	T21
Case 4	24	19 High Risk	Second Trimester Screening	Bilateral choroid plexus cyst	T18
Case 5	42	16 High Risk Screening	Second Trimester	Bilateral pyelectasis	T21

various authors and papers. Changing paradigm about prenatal screening and diagnosis caused earlier screening protocols, better screening techniques. Therefore, second trimester is late period for the screening of common aneuploidies. Pregnant women who screened in the second trimester by biochemistry markers, soft markers for aneuploidy contributes little benefit for the decision of invasive diagnostic test.

Keywords: Aneuploidy, second trimester screening, soft markers

[PP-243]

Detection of 15q (Prader Willi/Angelman syndrome) deletion in maternal cell-free fetal DNA test; A case report

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Recently, the detection of cell free fetal DNA particles in maternal plasma have been increasingly used for prenatal screening of common aneuploidies, known as trisomy 21, 18, and 13. Application of this non-invasive prenatal screening (NIPS) has evolved with addition of testing some microdeletion syndromes as 22q (DiGeorge syndrome), 15q (Prader-Willi/Angelman syndromes), 11q (Jacobsen syndrome), 8q (Langer-Giedion syndrome), 5p (Cri-du-chat syndrome), 4p (Wolf-Hirschhorn syndrome), and 1p36 deletion syndromes. Even though NIPS promises to detect microdeletion syndromes in prenatal period, the data is limited to support the use of this technology in screening of microdeletion syndromes because its unknown specificity and sensitivity. Here, we report the first case of a 15q (Prader-Willi/Angelman syndrome) deletion detected with NIPS by massively parallel sequencing in a twin pregnancy, which was confirmed with invasive prenatal tests.

Keywords: 15q deletion, Angelman Prader Willi syndrome, microdeletion syndromes, non invasive prenatal screening test, prenatal genetic screening

[PP-244]

Diagnosis of fetal enterolithiasis

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Objective: Diagnosis of fetal enterolithiasis with ultrasound.

Material and Methods: A 32 year old woman gravida 4, para 1, abortus

2 was referred to our perinatology clinic for polyhydramnios. Her first child was healthy. She had no previous history of medication or radiation exposure. The patient did not have routine pregnancy follow-up.



Figure 1. Fetal enterolithiasis, dilated intestinal loops and intraluminal hyperechogenic meconium calcifications



Figure 2. Postnatal evaluation, anal atresia

The measurements of the fetus was compatible with 37 gestation weeks. We did not visualize fetal stomach and bladder during ultrasound examination and recognised intraluminal hyperechoic meconium calcifications and dilated intestinal loops. The transvers diameter of the colon was measured 40 mm. The single deepest vertical amniotic pocket was 10 cm so we diagnosed polyhydramnios. With this ultrasonographic findings, we diagnosed fetal enterolithiasis; possible cloaca anomaly and rectourinary fistula suspicious oesophageal atresia and hospitalized the patient. She delivered 2550 gr baby by Cesarean section because of previous cesarean delivery. The fetal gender was undetectable. The postnatal evaluation showed oesophageal atresia, anal atresia and ambiguous genitalia. There was a single opening on the perineum for both urine and faeces excretion. The baby was referred to pediatric surgery department and was operated for gastrointestinal atresias immediately. The oesophagus was repaired primarily and colostomy was performed. The chromosomal analysis for fetal gender is under progress.

Conclusion: Fetal enterolithiasis is a very rare condition which can be associated with multiple gastrointestinal atresias, persistent cloaca, small bowel stenosis, total colonic aganglionosis, imperforate anus. Although the main mechanism of this image is uncertain, it is thought to be occurred by the mixture of meconium and fetal urine through a rectourinary fistula. Fetal enterolithiasis diagnosis is a very important and helpful step because it is associated with major fetal anomalies. The baby can be referred to tertiary centers for postnatal evaluation.

Keywords: Fetal enterolithiasis, urorectal septum malformations, cloaca anomalies

[PP-245]

Twin Pregnancy with anhydramnios and bilateral multicystic dysplastic kidney in one fetus: a case of Potter 2 syndrome

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Objective: To underline the diagnoses and management of fetal bilateral multicystic dysplastic kidney during intrauterine period

Material and Methods: multicystic dysplastic kidney, called as renal dysplasia or Potter type2, has an incidence of 1 / 1000-5000 in live births. 75-80% of cases are unilateral. The diagnosis of multicystic dysplastic kidney is performed by obstetric ultrasonography in the second trimester. Large kidney volume and hyperechoic parenchyme surrounded by non functional and non communicating, thin-walled, variant sized cysts are remarkable ultrasound findings in fetal multicystic dysplastic kidney. Cases of unilateral multicystic dysplastic kidney have normal sized urinary bladder and amniotic fluid with good prognosis. Urinary bladder is not seen in case of bilateral multicystic dysplastic kidney. Scarce amount of amniotic fluid and poor prognosis are observed in that case. There are accompanying anomalies in 25-28% of cases.

Results: A 34 years old G4P3 woman who is 17 w pregnant according to last menstrual period was referred to our clinic because of oligohy-

dramnios in one fetus and twin pregnancy. Dichorionic diamniotic twin pregnancy, one of which has anhydramnios was observed in ultrasound examination. The right kidney size was 23x23 mm and the left one was 23x19 mm in anhydramniotic fetus in ultrasound examination. hyperechoic parenchyme surrounded by non communicating cysts and anhydramnios made the diagnosis of multicystic dysplastic kidney. On the other hand, the other fetus had normal kidney size and amniotic volume. Urinary bladder of anhydramniotic fetus was not seen in ultrasound examination. Parents were informed about the fetus having multicystic dysplastic kidney which is incompatible with life and about decision on spontaneous follow-up of pregnancy because of healthy fetus. Delivery was performed at 37th week and fetuses was male and alive weighting 2250 g and 2220 g. The fetus having multicystic dysplastic kidney had survived for 12 hour and then passed away.

Conclusion: Management of fetal multicystic dysplastic kidney depends on whether the anomaly is one-sided or two-sided. Existence and severity of the other anomalies are the responsible factors that change the management of fetal one sided multicystic dysplastic kidney. Pregnancies are followed up spontaneously in isolated fetal one sided multicystic dysplastic kidney cases. On the other hand fetal echocardiograph should be performed and pediatric urolog consultation should be taken in these cases. Since fetal two sided multicystic dysplastic kidney are incompatible with life, parents should be informed about this and suggested termination of pregnancy. In cases of anhydramnios, the possibility of bilateral fetal multicystic dysplastic kidney should be kept in mind. The option of pregnancy termination should be offered in these poor prognostic cases.

Keywords: Bilateral multicystic dysplastic kidney, Potter 2 syndrome, prenatal diagnosis

[PP-246]

Familial Mediterranean Fever affect onto fetal kidney: A case report

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Introduction: FMF (Familial Mediterranean Fever) is a periodic disease characterized by recurrent attacks of fever accompanied by serious membran disease. One of the most devastating complications of FMF is amyloidosis, which mainly affects the kidneys but may also involve other organs and tissues. colchicine is the drug of choice (1).

Case: A 34 year-old, G4A2P1 with an intrauterine spontaneous pregnancy was referred to our clinic at 7w5d. Her body mass index is 35,1. She has had FMF disease for 15 years with colchicine controlled with 6 years. She had sometimes recurrent attacks of fever and kidney amyloidosis for 5 years. Her daughter was born 3150 gram and Apgar score 9/10 in 2005, she is healthy. She had a past cesarian section, hypertension and hypothyroid with regulated by drugs. She has used colchicine and not lived attacks during pregnancy. She hadn't hatch first and second trimester scanning and oral glucose tolerance test. At our clinic, a sonogram was performed in 24 week: fetal right kidney had minimal pelvic calixiel dilatation, antero-posterior diameter

is 6-8 millimetres. We follow the dilatation and it didn't increase during pregnancy. Her cesarian section was performed 38w6d. The girl was born 3210 gram in march 2016 and Apgar score 9/10. The mother's biochemistry Results: creatine 0.57 calcium 8.8 potassium 4.3. We started postoperative thromboprophylaxis. After delivery an abdominal sonogram was performed to baby. Her right kidney had minimal expansion pelvis antero-posterior diameter 8 millimetres. Her left kidney had normal appearance and there was no problem related urine.

Discussion: Two factors may theoretically affect fertility and pregnancy with FMF, the disease itself and colchicine treatment. Regarding the first factor, previous studies have shown that recurrent attacks of FMF caused peritoneal fibrosis leading to scarring of the salpinx thereby leading to mechanical (secondary) infertility (2). The onset of clinical manifestations begins before the age of 5 in 65% of FMF cases and before 20 years of age in 90% of cases. The onset of the disease may occur as early as 6 months of age (3). Before the advent of colchicine, amyloidosis was relatively frequent. It occurred in up to 60%–75% of patients over the age of 40 (4). In our clinical case baby who has a fetal kidney expansion seems most rarely. Maybe baby will have amyloidose disease in the future. There is no enough work in this regard and never been studied before. Increased pregnancy complications: abortion, small gestational age, intrauterine growth restriction, pre-eclampsia, thromboembolic phenomena, renal failure, resistant anemia, preterm birth, fetal kidney involvement rarely.

Keywords: Colchicine, fetal kidney, FMF, pregnancy with amyloidosis

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[PP-247]

Appendiceal mucocoele

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Mucocoele of appendix vermiformis is a rare pathology and it is characterized by a gross enlargement of appendix vermiformis due to accumulation of mucoid substance in the lumen. Preoperative diagnosis of appendiceal mucocoele is difficult because its clinical presentation is not specific and it can mimic right-sided adnexal masses. It also can accompany mucinous cysts of the ovaries. Here we aimed to re-

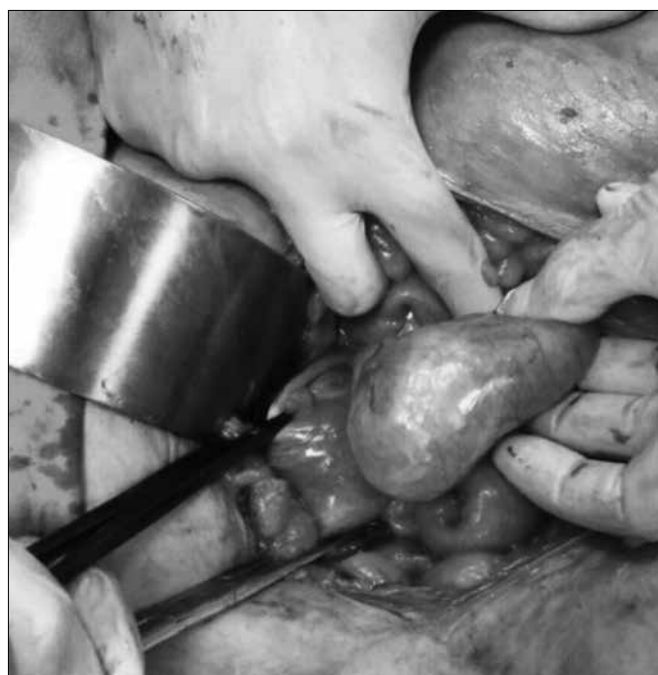


Figure 1. Intraoperative appearance of cystic mass

port a case of appendiceal mucocoele in a 60 years-old postmenopausal woman who was admitted to our clinic with lower abdominal pain. Transvaginal ultrasonographic examination observed us two right-sided adnexal masses; 42x30 mm anechoic cyst and 66x34 mm tubular cystic mass. The serum CA 125 level was within normal limit (Ca-125: 13.4). During the laparotomy; the tubular cystic mass was seen that originated from appendix vermiformis and appendectomy was performed. Histology confirmed a diagnosis of appendiceal mucocoele. Although appendiceal mucocoele is a rare entity and preoperative diagnosis is difficult; it should be considered in the differential diagnosis of right sided adnexal masses.

Keywords: Appendix vermiformis, benign tumor, adnexal masses, differential diagnosis

[PP-250]

Spontaneous uterine rupture due to placenta percreta in second trimester of pregnancy: A case report

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Introduction: Placental invasion anomalies are life threatening complications of pregnancy, which occur when placenta does not separate from the uterine wall completely following delivery. The prevalence is known to be approximately 1/500 to 1/2500 pregnancies. Because of the worldwide increasing cesarean section rates, frequency of

abnormal placentation have raised in recent years. Other predisposing factors for abnormal placentation are placenta previa, advanced maternal age and history of uterine surgery. The grade of abnormally invasive placenta is defined according to depth of invasion. Placenta percreta is the most severe form, in which placental villi penetrate through the uterine serosa and sometimes into neighbor organs such as cervix, bladder or bowel. Uterine rupture is one of the catastrophic complications of placenta percreta which may lead shock, peripartum hysterectomy, cystotomy, intensive care unit admission, infection and prolonged hospitalization. Uterine rupture due to placenta percreta mainly occurs during the third trimester at the time of labor-type uterine contractility. Based on our review of medical literature, there are only a few isolated case reports in the second trimester.

Here, we presented an unusual case of massive intraperitoneal hemorrhage in the second trimester of pregnancy owing to uterine rupture secondary to placenta percreta.

Case: A 26-year old pregnant woman at 27 gestational weeks with a history of two previous cesarean sections admitted to our center because of abdominal pain and vaginal bleeding. The symptoms were started approximately 3-4 hours before admission. On physical examination, mild abdominal tenderness was detected in the umbilical region. Ultrasound examination revealed placenta previa with moderate amount of intraperitoneal fluid. The border between myometrium and placenta was not differentiated. A paracentesis under ultrasound guidance was performed in the right upper quadrant and yielded heavily blood stained fluid, suggestive of a possible intraperitoneal active bleeding. An urgent laparotomy was performed due to suspected uterine rupture. There was 1500 ml of blood in the peritoneal cavity and placenta was protruding through a bleeding full thickness uterine defect (Figure 1). A male fetus with Apgar scores of 6 and 9 at 1 and 5 min, respectively, weighing 1370 g was delivered by vertical fundal incision. The placenta was found to be densely adherent to the anterior uterine wall. The patient became hemodynamically stable and thus, it was decided to continue conservative management. The placenta was removed completely by piecemeal excision as close as possible to the uterine lining. The defect in the uterus closed rapidly and hemorrhage was controlled. Both uterine arteries were ligated. During the operation, 3 U erythrocyte suspension were transfused. The patient was discharged on the 3th day after surgery without complications.



Figure 1. Intraoperative view of uterine rupture caused by placenta percreta (arrow)

Conclusion: Placenta percreta induced spontaneous uterine rupture is difficult to diagnose in second trimester of pregnancy. The possibility of uterine rupture should always be kept in mind when a patient with a suspicion of adherent placenta admitted with signs of abdominal pain and free fluid in the peritoneal cavity. A state of alertness for prenatal diagnosis of cases at risk and prompt surgical management is essential to reduce perinatal mortality and morbidity.

Keywords: Placental invasion abnormality, placenta percreta, uterine rupture

[PP-252]

A case of serous ovarian carcinoma presenting with postmenopausal tubo-ovarian abscess

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Introduction: Tuboovarian abscesses (TOAs) are considered to be a problem during a woman's reproductive ages, and the diagnosis appears to be infrequent in postmenopausal women. It has been reported that 34% of patients hospitalized with a diagnosis of acute genital tract infections in reproductive ages develop TOA. It is unclear why some reproductive aged women with pelvic inflammatory disease (PID) develop TOA, whereas the majority of them do not. Anyway, it seems to be a serious problem to be solved that TOA may be related to a concomitant gynecological malignancy in a postmenopausal woman.

Case: A-63 year old postmenopausal patient was admitted to our gynecological outpatient clinic with a history of 3 months ongoing lower abdominal pain. The patient has been in menopause for 18 years. Her medical history was unremarkable with no previous surgery and systemic disease, except hypertension. Her initial gynecological pelvic examination presented right adnexal fullness. A transvaginal ultrasound scan revealed fluid collection of 39x21 mm in the uterine cavity and a 3.5 cm right adnexal cystic formation suspicious for TOA without any other pathology of the genitourinary system. Her laboratory investigations including tumor markers were within normal limits with a leucocyte count of 8,841/mm³ and C-reactive proteins were low. Endocervical curettage and probe curettage were performed under general anesthesia. Doxycycline 500 mg twice a day was given for one week, and she was scheduled for the pathological result. Unfortunately, pathological findings did not provide enough material for diagnosis. Because of the persistence of fluid collection and an adnexal mass, the patient was hospitalized and an antibiotic regimen of gentamicin 2 mg/kg loading dose following 1.5 mg/kg gentamicin and clindamycin 900 mg every 8 hours intravenously was started. On the third day of antibiotic therapy, exploratory laparoscopic operation was planned and drainage and abscess wall sampling was performed. The patho-

logical result revealed malign epithelial tumor and no microorganism was defined on abscess culture. One week after the initial operation, tumoral debulking surgery, including hysterectomy, bilateral salpingo-oophorectomy, bilateral pelvic-paraaortic lymph node dissection, total omentectomy, appendectomy, was performed. The patient was diagnosed as having a FIGO (International Federation of Gynecology and Obstetrics) stage IIIC tumor, and received six cycles of Paclitaxel and Carboplatin regimen after surgery.

Conclusion: Patients presenting with postmenopausal TOA should be investigated in detail to exclude a concomitant gynecological or any other pelvic malignancy. In order to obviate any delay in the diagnosis and treatment, medical treatment alone or conservative treatment should be avoided.

Keywords: Tubo-ovarian abscess, ovarian carcinoma

[PP-253]

Surgical removal of an intrauterine device invaded into ileum and resulted as a tubo-ovarian abscess

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Introduction: Intrauterine devices (IUDs) are the most common long-acting reversible contraceptive methods. Although IUDs are generally easy to insert, a number of health risks as perforation may occur. Perforations are mostly encountered during insertion process. Rarely, incomplete perforations turn into complete perforations when IUD is dislocated due to uterine contractions, which may cause adjacent organ injuries. Here we present a case of a symptomatic perforation by an IUD into ileum resulted as a tubo-ovarian abscess

Case: A 38-year old patient, who received TCu 380A in approximately 7 years ago, presented at the outpatient clinic with a complaint of lower abdominal pain and leucorrhoea during the last 3 weeks. Pelvic examination revealed pain in cervical movements, and adnexal tenderness with a 10-cm palpable mass in the posterior cul-de-sac. The threads of the IUD were not visible. A transvaginal ultrasound scan revealed the retained intrauterine device in the uterine cavity possibly extended through the fundal myometrium, a 3 cm right ovarian abscess, a 7 cm pyosalpinx adjacent to the right ovary and a 10-cm Douglas abscess surrounded by bowel loops. At admission, her leucocyte count was 24,000/mm³, C-reactive proteins were high, she had a fever of 38.8 °C. The patient received a 12-day course of antibiotic regimen of gentamicin 2 mg/kg loading dose following 1.5 mg/kg gentamicin and clindamycin 900 mg every 8 hours intravenously. Clinical findings persisted despite upon which, antibiotic treatment was reorganized with ceftriaxone and metronidazole. Transvaginal ultrasound-guided drainage of tuboovarian abscess with concomitant hysteroscopy procedure was decided. Almost 200 mL of purulent, dense, brownish



Figure 1. Intraoperative view of IUD invaded to ileum in laparoscopy



Figure 2. IUD arms embedded in myometrium and T-body inside the ileum lumen

pus was drained until it was completely emptied. After injection of sterile saline solution and irrigation diluted baticon and rifampicin, all material was aspirated, and hysteroscopy was performed to remove the IUD. During hysteroscopy, it was observed that IUD was extended through the fundal myometrium with its copper-bearing rod in the cavity and arms invisible in the myometrium. There was a negative pressure when aimed to pull out with the resectoscope, and gave a feeling that it was invaded into a visceral organ, therefore laparoscopy was performed (Figure 1). In exploratory laparoscopy, it was observed that ileum and sigmoid colon were conglomerated and attached densely on fundus, and cul-de-sac was totally obliterated. The two flexible side arms were embedded inside the ileum. With intraoperative surgical consultation, it was decided to proceed to laparotomy. During dissection of dense adhesions between the loops of bowel and uterus, a perforation site was observed in sigmoid colon (1 cm) and ileum (1.5 cm) (Figure 2). IUD was removed from the defect. Considering the massive intra-abdominal abscess formation, with purulent fluid and possible fecal material from the perforated IUD that was embedded in the ileum, 15 cms of ileum was resected, and loop ileostomy was performed. The patient recovered without any incident, and was discharged 12 days after the operation. Clinical evaluation at 1-month postoperatively was uneventful.

Conclusion: Perforation of the uterus should be kept in mind in which IUDs are not visible in the uterine cavity.

Keywords: IUD, tubo-ovarian abscess, ileum invasion

[PP-255]

Six years data about abandoned and incest babies born in Dr. Zekai Tahir Burak Women's Health Training and Research Hospital

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Objective: Incest is sexual activity between family members or close relatives. Father-daughter incest or sibling incest occurs more frequently than other forms of incest. Many social and cultural factors and mental illness are the reasons for abandoned children issue. An abandoned child is called a foundling. In this poster, we present the 6 years hospital data about social services related to abandoned and incest babies (2010-2015) of Dr Zekai Tahir Burak Women's Health Training and Research Hospital (Ankara).

Material and Methods: From our Hospital records, we reached the number of abandoned and incest babies some of which were taken by social services between the years 2010-2015.

Results: Our hospital datas are given in the table. The foundling number stayed steady in 6 years except a little increase in year 2014. Unmarried single mothers were the most common reason of child abandonment. Between the years 2010-2015 our incest birth rate was 0.005% (6 babies out of total 108201 births) and the babies were protected by social services.

Conclusion: Training about family planning techniques and strengthening social support services to single mothers seems to be important.

Keywords: Incest, foundling, social service

Table 1. Abandoned babies born in Dr Zekai Tahir Burak Women's Health Training and Research Hospital

Years	Babies Taken By Social Services*	Social Services Are Informed#	Total	Total Birth Number
2015	12 (0.06%)	20	32 (0.18%)	17704
2014	22 (0.11%)	18	40 (2.17%)	18429
2013	22 (0.1%)	17	39 (0.21%)	17917
2012	16 (0.09%)	5	21 (0.11%)	17690
2011	12 (0.06%)	15	27 (0.14%)	18215
2010	6 (0.03%)	15	21 (0.11%)	18246

[PP-256]

Outcomes of assisted reproduction techniques in men with Klinefelter syndrome

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Objective: Klinefelter syndrome (47, XXY) (KS) is the most common sex disorder affecting about 1 in 650 men and characterized by low level of testosterone. Our aim is to evaluate the outcomes of fertilization and pregnancy rates of men with Klinefelter syndrome.

Material and Methods: This retrospective analysis (2009-2015) included 17 men with KS (19 cycles). The diagnosis of KS was confirmed by cytogenetic evaluation of peripheral lymphocyte metaphases. Follicle stimulating hormone (FSH), luteinizing hormone (LH) and total testosterone levels of each patient were measured. Testicular sperm extraction (TESE) procedure was performed. When testicular spermatozoa were found, intracytoplasmic sperm injection (ICSI) was performed. Fertilization rate was determined from the proportion of normally fertilized embryos ascertained by the presence of two pronuclei on the day following insemination. Embryos were evaluated for further development. Pregnancy rate was recorded.

Results: The male ages arrange from 25 to 41 years, median as 33 years old. The patients' median body mass index was 24 (16.9-27.8) kg/m². Serum FSH levels were 35.3 (20.9-47) IU/L, LH 18.35 (13.6-36) IU/L, testosterone 67.3 (1.1-399) ng/ml. In 47.3% (9/19) of the cycles, sperm cells were isolated after TESE. Median number of embryos was 5 (0-9). ICSI + preimplantation genetic diagnosis were performed in 3 cycles. Three pregnancies occurred.

Conclusion: Patients with KF are able to conceive with TESE-ICSI.

Keywords: Klinefelter syndrome, pregnancy, TESE-ICSI

[PP-259]

Successful treatment of an isolated torsion of a fallopian tube in pregnancy with laparoscopic surgery: A case report

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Introduction: Isolated torsion of a fallopian tube in pregnancy is a rare event in women of reproductive age and diagnosis is difficult. The diagnosis is often difficult and established during the operation. Here we present a primigravida at 16 weeks of pregnancy who was pre-

sented with isolated fallopian tube torsion and managed laparoscopic by salpingectomy.

Case: A 30-years-old nullipara presented to the gynecological emergency room with complaint of severe low abdominal pain. This pain was situated in the right lower west, and the pain was constant and acute. She was gravid 1, para 0, Vomiting and nausea were associated with the pain. She had been attending an antenatal clinic regularly. Until the occurrence of the pain, her pregnancy had been uneventful. The patient was afebrile and vital signs were stable. Abdominal examination revealed tenderness in the right lower abdomen and a soft abdomen. The uterine fundal height corresponded to the period of gestation. The uterus was relaxed with a regular fetal heart. No uterine contractions were noted. Tenderness was present in the left lower west. The vaginal examination showed a closed cervix without any evidence of bleeding or any abnormal discharge. An ultrasonogram showed a single live fetus in transverse presentation. An anechoic mass (79 mm×90 mm) was observed in the right lower west. The laboratory blood parameters were as follows: 11.6×10⁹/L white blood cells (WBCs), 4×10¹²/L red blood cells (RBCs), 9.11 g/dL hemoglobin (HGB), and 322.0×10⁹/L platelets (PLTs). The laboratory parameters for urine and liver function were normal. Laparoscopy showed an uterus correspondant to 18 weeks. Right fallopian tube was torsed 3 times and seemed necrotic (Figure 1). It also showed 8-9 cm para-fallopian cyst (Figure 2). The ovaries and left fallopian tube were normal in appearance. After surgical detorsion salpingectomy was performed

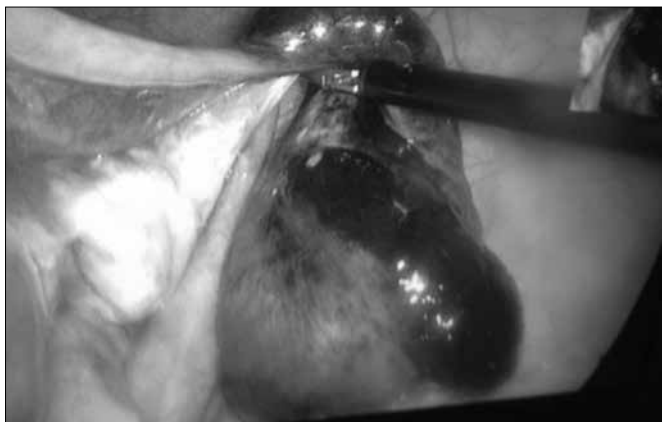


Figure 1. Isolated tubal torsion

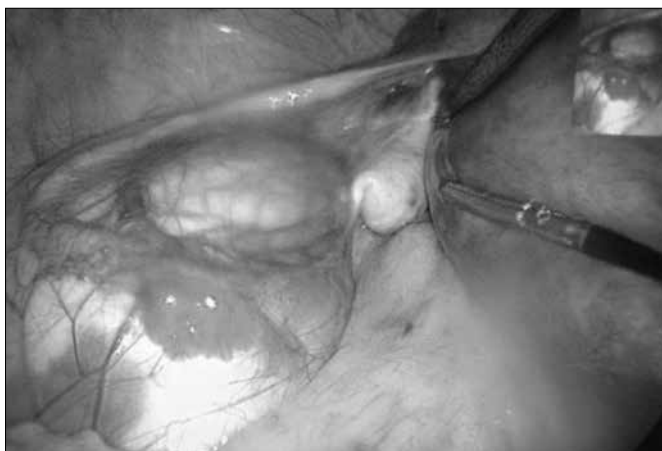


Figure 2. Para-fallopian cyst

because of presence of necrosis and bleeding from necrotic sides. Left para-fallopian cystectomy was also performed. The postoperative period was uneventful and the patient was discharged on the third postoperative day in good condition. The histopathology report hemorrhagia and necrosis of the right fallopian tube and the cyst reported as Hydatid's of Morgagni. The operation course and were uneventful. The fetus was delivered at term by elective cesarean section due to transverse presentation.

Conclusion: Isolated fallopian tube torsion is a rare condition in pregnancy. We recommend tubal torsion as a cause for acute lower abdominal pain during pregnancy and consider it in differential diagnosis. We also recommend diagnostic laparoscopic surgery in treatment at early pregnancy weeks.

Keywords: Morgagni hydatid, pregnancy, tubal torsion

[PP-261]

Management of Fournier's Gangrene in an elderly women: A case report

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Introduction: Fournier's Gangrene (FG) is a rapidly progressive form of infective necrotizing fasciitis of the perineal, genital, or perineal regions, leading to thrombosis of the small subcutaneous vessels and necrosis of the overlying skin¹. The reported mortality rate varies widely in the literature, ranging 13% to 50%^{2, 3, 4}. In this case we reported an old, diabetic, obese woman present with wide vulvar necrotizing fasciitis.

Case: A 72 years old patient applied to our emergency room with a painful lesion which has purple areas in her left vulvar area and also extending to lower west. Approximately 1 month ago she has applied to a hospital with a painful lump which looks like pimple. As they thought nothing important they have prescribed local antibiotics. As the swelling and pain increased the patient applied to a hospital two more times and used amoxicillin clavulanate per oral and local therapy. She was brought to our hospital by her relatives as she still has same complaints, has fever and also worsening in her general condition. In her physical examination there was a necrotic lesion which has borders above the upper limit of the mons pubis, reaching the left gluteal region at the bottom. Lesion also reaches to left labia minus and anal ring in medial side (Figure 1). She had 17 year history of uncontrolled diabetes mellitus and 14 year old history of hypertension. In her examinations WBC: 21,830 10¹²/L, Hb: 11 g/dL, Hct: 31.8, Plt: 267,8 10⁹/L, CRP: 41 mg/dL, glucose: 245 mg/dL, urea: 136 mg/dL, creatinine: 3.12 mg/dL, and her liver function were normal. Ultrasonographic examination showed widely subcutaneous millimetric air images at perineum. With these findings we considered as it was Fournier's gangrene and the patient was taken up for emergency operation. Partial vulvectomy and widely debridement has done. Postoperatively patient managed with Linezolid 2*60 mg, Meronem 1*1 g, Flagyl 4*500 mg and wet dressing. Regular wet dressing was done along with topical application of hydrogen peroxide, povidone iodine and physiological saline solution and honey. On 6th postoperative day we saw purulent discharge and necrotic areas, thereby on 7th postop-



Figure 1. Fournier's gangrene



Figure 2. Patient before secondary suturation

erative day second debridement has done (Figure 2). Postoperative 52nd day her wound was reconstructed with secondary suturing. She was discharge from the hospital on 63th postoperative day.

Conclusion: Necrotizing fasciitis of the vulvar region is a severe condition with high morbidity and mortality. Good management is based on aggressive debridement, broad spectrum antibiotics, and intensive supportive care.

Keywords: Fournier's gangrene, vulva

[PP-262]

Umbilical endometriosis: A case report

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Objective: Endometriosis is defined as the presence of functional endometrial tissue outside the uterine cavity. Symptoms are dysmenorrhea, chronic pelvic pain and infertility. It is most commonly localized in pelvis (ovaries, peritoneal uterosacral ligaments, Douglas and rectovaginal septum). The peak incidence of the disease is around 40 years old. Abdominal wall endometriosis which is a subtype of extrapelvic endometriosis consists of 4% of all endometriosis cases. It is most commonly localized at incision scars and rarely on umbilicus, at inguinal canal and on rectus abdominis muscle. Umbilicus is a rare localization for extraabdominal endometriosis and it is reported as 0.5-4% of all extraabdominal endometriosis cases. We reported an umbilical endometriosis case that we have managed in our clinic.

Case: 34 years old, G3P3 patient is applied to our clinic due to pain, swelling, tenderness on umbilicus and brown discharge from umbilicus during menstruation for last 1 year. In the history of the patient, there was no operation history. In ultrasonography; 2cm in diameter, thin-walled, semisolid cystic formation is detected on umbilicus. This cystic formation is resected totally and the pathologic finding of the formation is reported as umbilical endometriosis.



Figure 1. Pathology specimen after excision



Figure 2. Ultrasound figure

Conclusion: Abdominal endometriosis patients, as in our case are usually applied with advanced pain on the mass during menstruation. The mass can be detected easily on examination. The definitive diagnosis is confirmed by histopathological examination. The differential diagnosis includes abscess, lipoma, hematoma, sebaceous cysts, desmoid tumors, primary and metastatic cancer and should be considered primarily. In conclusion, endometriosis should be kept in mind in the differential diagnosis of abdominal wall masses and total excision should be performed if diagnosis is suspected by ultrasonography and MRI.

Keywords: Endometriosis, umbilical endometriosis

[PP-263]

Relationships of ADCmin and SUVmax of the primary tumor with clinicopathological characteristics in endometrial cancer

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Objective: To investigate relationships of maximum standardized uptake value (SUVmax) and minimum apparent diffusion coefficient (ADCmin) of the primary tumor to clinicopathological features, and to compare their predictive ability in patients with endometrial cancer (EC).

Material and Methods: A prospective case-series with planned data collection was conducted in a total of 45 patients who underwent

staging surgery following a preoperative evaluation with 18F-fluorodeoxyglucose positron emission tomography combined with computed tomography (18F-FDG PET/CT) and diffusion-weighted magnetic

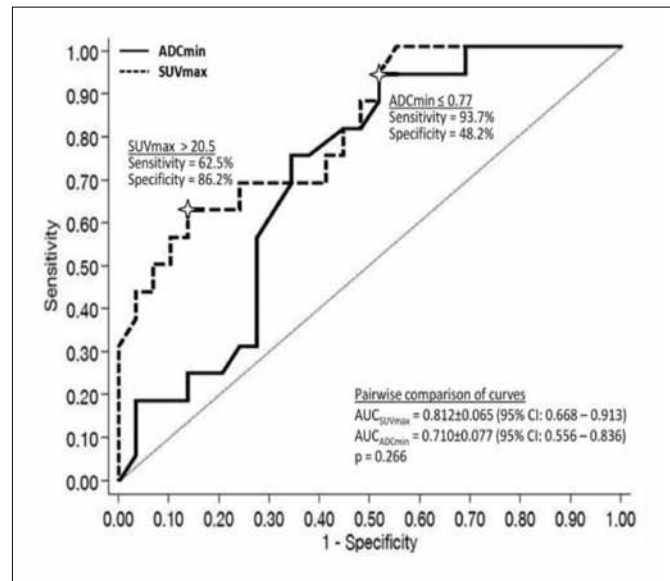


Figure 1. Receiver operating characteristic (ROC) curve analysis for the diagnostic value of ADCmin and SUVmax of the primary tumor in predicting deep myometrial invasion

Table 1. Multiple linear regression analysis of factors associated with ADCmin and SUVmax of the primary tumor

Variables	Univariate analysis		Multiple linear regression analysis		
	r/U	P	Coefficients	95% CI	P
Age					
ADCmin	-0.405	0.006	-0.105	-0.361 to 0.152	0.416
SUVmax	0.340	0.022	0.136	0.122 to 0.394	0.293
Stage					
ADCmin	-0.257	0.088	-	-	-
SUVmax	0.436	0.003	2.479	2.217 to 3.176	0.721
Non-endometrioid histology					
ADCmin	103.5	0.051	-	-	-
SUVmax	129.0	0.209	-	-	-
Grade					
ADCmin	-0.224	0.139	-	-	-
SUVmax	0.272	0.071	-	-	-
Tumor size					
ADCmin	-0.230	0.128	-	-	-
SUVmax	0.486	0.001	1.269	-0.225 to 2.765	0.094
Deep myometrial invasion					
ADCmin	134.5	0.021	9.457	2.693 to 16.221	0.007
SUVmax	87.0	0.001	8.494	1.176 to 15.810	0.024
Lymphovascular space invasion					
ADCmin	110.5	0.015	2.758	-3.254 to 8.769	0.360
SUVmax	101.0	0.007	2.056	-4.515 to 8.628	0.530
Cervical invasion					
ADCmin	193.0	0.556	-	-	-
SUVmax	153.5	0.119	-	-	-
Adnexal invasion					
ADCmin	106.5	0.776	-	-	-
SUVmax	56.5	0.040	-	-	-
Lymph node metastasis					
ADCmin	109.0	0.247	-	-	-
SUVmax	54.0	0.057	-	-	-
No. of metastatic lymph nodes					
ADCmin	-0.171	0.262	-	-	-
SUVmax	0.296	0.049	0.932	-0.368 to 1.871	0.463
Recurrence					
ADCmin	90.5	0.376	-	-	-
SUVmax	87.0	0.316	-	-	-
Survival					
ADCmin	41.0	0.392	-	-	-
SUVmax	49.0	0.643	-	-	-

ADCmin, minimum apparent diffusion coefficient; SUVmax, maximum standardized uptake value; r, Spearman's rho correlation coefficient; U, Mann-Whitney U-test statistic; CI, confidence interval. Boldface indicates statistical significance (P < 0.05).

resonance imaging (DW-MRI). Relationships between variables were analyzed using the multiple linear regression analysis.

Results: The mean ADCmin and SUVmax were 0.72 ± 0.22 and 16.54 ± 8.73 , respectively. In univariate analysis, while the potential factors associated with ADCmin were age, myometrial invasion (MI), and lymphovascular space involvement (LVSI); the potential factors associated with SUVmax were age, stage, tumor size, MI, LVSI and number of metastatic lymph nodes. However, only MI remained to be an independent variable associated with ADCmin ($p=0.007$) as well as SUVmax ($p=0.024$) after adjustment for other confounders in multivariate analysis. Optimal cutoff values of ADCmin and SUVmax for predicting deep MI were found to be ≤ 0.77 [93.7% sensitivity, 48.2% specificity, and 93.0% negative predictive value (NPV)] and >20.5 (62.5% sensitivity, 86.2% specificity, and 81.0% NPV), respectively; although the comparison of two diagnostic tests revealed no significance ($p=0.266$).

Conclusion: MI is the sole clinicopathological feature independently associated with SUVmax as well as ADCmin. However, predictive performances of both parameters are not high enough to support the routine use of 18F-FDG PET/CT or DW-MRI.

Keywords: Endometrial cancer, maximum standardized uptake value, minimum, apparent diffusion coefficient

[PP-264]

Maternal mortality due to hemorrhage: A four-year community-based study in Turkey

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Objective: Our aim is to analyze the rates of obstetric hemorrhage in maternal deaths in Turkey from 2012 to 2015 with the use of data from the study of the Preliminary Investigation Committee for Maternal Deaths.

Material and Methods: In this retrospective study, case files of all pregnancy-associated deaths recorded in Turkey between 2012 and 2015

were reviewed. All women with a hemorrhage complication associated with pregnancy and postpartum were consecutively evaluated. Maternal age, the etiologic factor of the hemorrhage and parity were recorded.

Results: Hemorrhage was responsible for 18.26 percent of the maternal deaths in Turkey in 2012. In 2015 the rate of obstetric hemorrhage was 15%. The decrease in rate revealed no statistical significance ($p=0.748$). During four years, it was noted that postpartum atony was the leading cause of maternal death due to hemorrhage. The patient population in our study had an increasing rate of bleeding secondary to placental ablation (Chi-square=21.675, $p=0.041$).

Conclusion: To identify and monitor risk factors in order to detect cases of postpartum hemorrhage is essential.

Keywords: Obstetric hemorrhage, maternal mortality, Turkey

[PP-267]

Vulvar biopsy results of patients with chronic vulvar pruritis

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Objective: Vulvar pruritis is one of the most common cause of admission to the gynecology outpatient department. The most common cause of acute onset vulvar pruritis is infection whereas pathological examination by biopsy is necessary for chronic vulvar pruritis.

Material and Methods: The pathology results of 188 patients admitted to our hospital's gynecology outpatient clinic with chronic vulvar pruritis and underwent biopsy between January 2010 and December 2015 were examined retrospectively.

Results: The mean age of the patients is 49. Of the patients 164 (87,2%) had dermatitis and dermatosis (lichen simplex chronicus 77, lichen sclerosis 42, dermatitis 33, chronic non-specific inflammation 11, lichen planus 1), 21 (11.2%) had squamous intraepithelial lesion (LSIL 15, HSIL 5, VIN-Differentiated type 1) and 3 (1,6%) had malignancy (squamous cell carcinoma).

Conclusion: The only complaint of patients with vulvar malignancy can be chronic vulvar pruritis. Pathologic analyses from the biopsy specimen, in patients with non-infectious chronic vulvar pruritis, helps early diagnosis and treatment for premalign vulvar lesions.

Keywords: Chronic vulvar pruritis, vulva biopsy

[PP-269]

Rudimentary horn pregnancy: Diagnosis and treatment

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Figure 1. Postpartum hemorrhage rates in maternal mortality cases between 2012-2015

Introduction: Unicornuate uterus with a rudimentary horn is a very rare type of Mullerian duct anomaly and in up to 80% of cases there is no communication between the unicornuate uterus and the rudimentary horn (1) Ectopic pregnancy in the rudimentary horn occurs in one out of 76,000–150,000 pregnancies (2). In only 29% of cases are diagnosis made prior to surgery. These patients may present vaginal bleeding, lower abdominal pain and cardio-vascular collapse if rupture occurs. We report a case of rudimentary horn pregnancy who diagnosed in the first trimester.

Case Report: A 21 year old Gravida 3 Para 1 with 8 weeks of pregnancy was admitted to the emergency unit with abdominal pain. On physical examination, there was abdominal sensitivity but defense and rebound was negative. Her ultrasound examination showed an ectopic gestational sac at right adnexa. There was no fetal nod, fetal heart activity and intra-abdominal fluid (Figure 1). B-HCG level was 43772 mIU/mL. The patient was hospitalized with the diagnose of ectopic pregnancy.

First we recommend the surgical intervention because of the high B-HCG level. The patient didn't accept the surgical intervention. We treated with methotrexate (50 mg/m²). Seven days after the methotrexate administration B-HCG level raised to 87814 mIU/mL. Ultrasound examination revealed a gestational sac at right adnexa and absent of right kidney. (Figure 2, 3). After the evaluation patient underwent laparotomy through a pfannenstiel incision.

The findings included a normal uterus with a normal ovary and fallopian tube on the left side. The pregnancy was in a rudimentary horn on the right side, with a normal ovary and fallopian tube attached to it (Figure 5). The horn was connected to the uterus just above the cervix



Figure 1. Intra-operative exploration of rudimentary horn

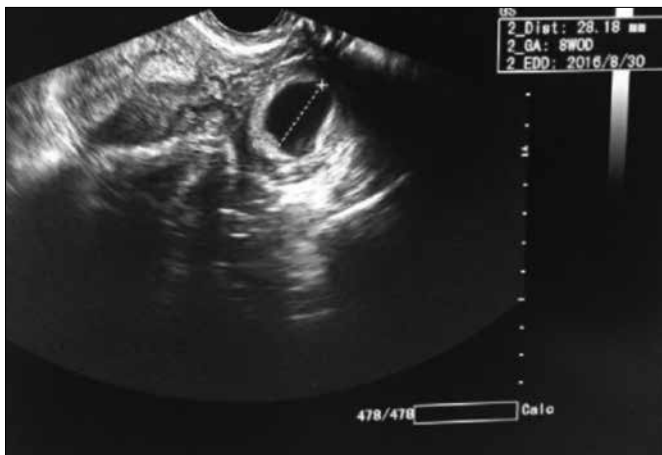


Figure 2. Ultrasound image of rudimentary horn pregnancy

by a thick fibrous band. A small incision was made over the pregnant horn and uterine horn removed (Figure 6).

Discussion: A unicornuate uterus with a rudimentary horn is the rarest anomaly and results from the failure of one of the Müllerian ducts to develop completely and an incomplete fusion with the contralateral side (3). Rudimentary horn pregnancies like in this case are difficult to diagnose and carries a high risk of maternal mortality. These cases usually result in the rupture of the horn in the second or third trimester (5). The key for diagnosis prior to the rupture is a high index of clinical suspicion. Tsafir et al. suggested the following criteria for diagnosing a pregnancy in the rudimentary horn: (1) a pseudo pattern of asymmetrical bicornuate uterus; (2) absent visual continuity between the cervical canal and the lumen of the pregnant horn, and (3) the presence of myometrial tissue surrounding the gestational sac (6). Immediate surgery is recommended whenever a diagnosis of a pregnancy in the rudimentary horn is made. The traditional treatment is a laparotomy. Conservative management, until viability is established, has been advocated in selected cases with large myometrial masses. Despite advances in ultrasound technology, the antenatal diagnosis of a rudimentary horn pregnancy remains difficult for inexperienced physicians.

Keywords: Rudimentary Horn, ectopic pregnancy, mullerian duct anomaly

[PP-270]

Laparoscopic surgery for ectopic pregnancy in the stump of a previous salpingectomy site-tubal stump pregnancy

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Background: Ectopic pregnancy remains to be a significant cause of maternal morbidity,

mortality and reproductive failure in the whole world. The incidence of ectopic pregnancy is approximately 1.3~2% of all pregnancies; and more than 90% of ectopic pregnancies are detected in the ampulla of the fallopian tube. Ipsilateral ectopic pregnancy occurs rarely and can be difficult to diagnose. Few cases have been reported in the literature. The frequency of tubal stump pregnancy is approximately 0.4% of all pregnancies.

Case: A 32-year-old woman gravida 3, para 0, with a history of secondary infertility was on follow-up at our IVF clinic with unexplained infertility diagnosis. The patient had the embryo transferred on 21 September 2015. On the routine control after the transfer, her serum β HCG was detected as 3031IU/L but no gestational sac was detected in the uterus by transvaginal sonography. Therefore the patient was referred to our clinic on suspicion of ectopic pregnancy. The patient had a medical history of gastric band surgery in 2003 due to obesity and laparoscopic surgery for right tubal pregnancy in 2012. The patient had no remarkable family history. Transvaginal ultrasonography determined a right adnexal mass measuring 13x11 mm, consistent



Figure 1. Ultrasonographic view of tubal ectopic pregnancy



Figure 2. Intraoperative view of tubal stump pregnancy

with a right ectopic pregnancy (Figure 1). Based on these test results, the patient was suggested to undergo laparoscopic surgery, and elective laparoscopy was performed to confirm the diagnosis. The operative findings showed a mass in the right tubal stump where tubectomy had already been performed (Figure 2), and we diagnosed it as tubal stump pregnancy. The ectopic part was removed laparoscopically with an advanced bipolar sealing device LigaSure (Covidien, Manhattan). After the surgery, the condition of the patient improved well and she was discharged from the hospital three days after the surgery.

Conclusion: Tubal stump pregnancy is difficult to diagnose since ectopic pregnancy commonly occurs in the fallopian tube. The incidence of tubal stump pregnancy is not known but had been reported approximately 1.16% of all ectopic pregnancies with mortality 10–15 times higher than the other forms of ectopic pregnancies. This is why the patients at whom ectopic pregnancy is suspected should be examined in detail. Clinicians should be aware that previous ectopic is a risk factor for future ectopics and that salpingectomy does not exclude ipsilateral ectopic pregnancy. Laparoscopic surgery is one of the options for tubal stump pregnancy, if diagnosed early and if the condition of the patient is stable.

Keywords: Tubal Stump pregnancy, ectopic pregnancy, laparoscopic surgery

[PP-271]

An asymptomatic case of a uterine rupture in a 39w Primigravida

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Introduction: A uterine rupture is a life-threatening event for the mother and the baby. Uterine rupture in pregnancy is an unusual and often catastrophic complication with a high incidence of fetal and maternal morbidity. Various factors are known to increase the risk of uterine rupture, but even in high-risk subgroups, the overall incidence of uterine rupture is 5.3/10.000 births for women without previous section.

Case presentation: This case report describes clinical characteristics of a 35 years old G3P0A2 39-weeks gestational age pregnant woman with a uterine rupture discovered during C-section. She had a history of 2 abortions and 1 septum resection surgery. She admitted to the emergency service of our hospital for the first time; for a stomach pain on 38. gestation weeks. In her vaginal examination the cervix was tightly closed. Non-stress test was reactive and there were no contractions. Gastroenterology consultation was taken. Pain was relieved, there was no vomiting and defecation was normal. Epigastric tenderness was positive. Upper abdomen USG and blood tests were advised. The ultrasound results showed nothing pathological. Blood levels were between the reference intervals. After one day of observation patient's symptoms were relieved. Control non-stress test was reactive and showed no contractions. Cervix was closed. Therefore the patient was discharged.

After a week the patient was admitted to the outpatient clinic for one of her routine check-ups. She was 39 weeks and 1 day pregnant. In her examination, the cervix was nulliparous and the NST showed no contractions but the fetus was non-reactive. In ultrasound examination the findings were fetal heart beat was positive, vertex presentation, decreased AFI, BPD 36w2d, AC 38w5d, FL 36w2d, TFA 3344 gr. According to the diagnosis of oligohidramnios the patient was hospitalized for labor induction. By the end of day 1 non-stress test showed decelerations at the fetal heart rates. C/S decision was taken. Phannestill and lower segment transverse incision was made during the surgery. After the delivery of the baby, when the uterus was exteriorized a rupture about 7-8 cm length and full-thickness including the serosa at the fundus was seen. 20-30 cc dark colored bleeding evidence was seen in the pouch of Douglas.

Conclusion: This case is unique in the sense that a catastrophic event was asymptomatic rupture of a uterus in a term pregnant patient. Consider the risk of a uterine rupture in high-risk groups presenting with gastrointestinal symptoms and even consider exteriorization of the uterus as a must if a C/S is performed to rule out a fatal risk.

Keywords: Epigastric pain, septate uterus, uterine rupture

[PP-272]

Evaluation of cases with a CVS following first trimester screening tests

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Objective: The aim of this study was to determine the aneuploidy rates in cvs in cases that underwent screening tests for various reasons, and also to determine the clinical importance of different indications for predicting aneuploidy.

Material and Methods: Results of 265 chorionic villus samplings (cvs) that performed in our clinic between 2011 and 2016 for different indications were evaluated. Cut-off value in first trimester combined test was considered as 1/270. In this context, cvs was applied to 68 cases with a combined test risk higher than 1/270, 56 cases with a determined abnormality in ultrasonography in first trimester, 19 cases with a history of aneuploidy in medical history, 20 cases with a nuchal thickness equals to and higher than 3 mm, and 102 cases with various causes.

Results: Chromosomal evaluation of 265 cases with cvs due to different indications revealed a total of 32 aneuploidy (12.07%). When the indications of cvs were evaluated, 16.17% of 68 cases with a combined test risk greater than 1/270 (n=11), 25% of 56 cases with an abnormality in ultrasonography (n=14), 30% of 20 cases with a nuchal thickness ≥ 3 mm (n=6), and 0.98% of 102 cases with various causes (n=1) had aneuploidy, but none of the 19 cases with an aneuploidy history had aneuploidy. When the additional risk factors were eliminated, and only 61 cases with a maternal age ≥ 35 were evaluated; only 1.63% (n=1) of cases had aneuploidy. In all of 265 chorionic villus sampling procedures, 232 normal, 1 non-replicated, 11 Trisomy 21 syndrome (34.37%), 6 Trisomy 18 syndrome (18.75%), 5 Trisomy 13 syndrome (15.62%), 2 Trisomy 2 syndrome (6.25%), 2 Turner syndrome (6.25%), 1 Trisomy 15 syndrome (3.12%), 1 46,XX inv (12) p11q13 (3.12%), 1 46,XY inv(9) p11q13 (3.12%), 1 Trisomy 21 + 47, XXY (3.12%), 1 47 XXX (3.12%) and 1 Mosaic Turner

(3.12%) were determined. When all of the cases were evaluated, fish (Fluorescence In Situ Hybridization) results were found to be conflicted with conventional cytogenetic analyses in 2.94% of 33 cases (n=1) with chromosomal analyze results.

Conclusion: Aneuploidy was determined in 12.07% of cases who had cvs for various reasons. When the indications were revealed, cases with a nuchal thickness ≥ 3 mm had a 30% of aneuploidy rate, and cases with any abnormality in first trimester ultrasonography had a 25% of aneuploidy rate. But, aneuploidy was found only in 16.17% of cases that had a cvs for an increased combined test risk. Most frequent type of aneuploidy was Trisomy 21 with a proportion of 34.37% (11/32), and following types were Trisomy 18 (18.75%; 6/32), and Trisomy 13 (15.62%; 5/32). Most significant aneuploidy risks in cvs for different indications were increased nuchal thickness, and abnormalities in ultrasonography. Contrary to expectations, advanced maternal age and previous history of aneuploidy had no significant risk increase.

Keywords: CVS, chorionic villus samplings, fish, screening tests, nuchal thickness

[PP-274]

Is intrahepatic cholestasis of pregnancy a risk factor for preeclampsia?

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Objective: Intrahepatic cholestasis of pregnancy (ICP) is the most common liver disorder specific to pregnancy. It is characterized by elevated liver enzymes, elevated serum total bile acids and pruritus especially in the third trimester. Preeclampsia (PE) causes both maternal and fetal mortality and morbidity. There is a relationship between ICP and Preeclampsia according to some previous studies done. Some similar inflammatory processes are available between these two important diseases. May be the similar genetic mechanisms are responsible for both diseases. The aim of this study is to investigate the prevalence of PE in pregnancies which are diagnosed as ICP.

Material and Methods: We performed a retrospective study of patients who were diagnosed with ICP according to the clinical presentation (pruritus) combined with laboratory abnormalities (elevated bile acids ($>10 \mu\text{mol/L}$)) and/or elevated liver enzymes, between 2013 - 2016 at Zeynep Kamil women's and children's disease training research hospital. Pre-eclampsia was defined as new onset of hypertension after 20 weeks of gestation in a previously normotensive women and either proteinuria or end-organ dysfunction or both. We examined the prevalence of preeclampsia in patients who were diagnosed with ICP, both diseases have increased liver enzymes in their respective prognosis.

Results: 93 women diagnosed with ICP based on both the clinic and laboratory criteria of ICP at our hospital. Of 93 ICP patients 12 were diagnosed as preeclampsia (%12.9). 4 of 12 preeclamptic patients were diagnosed as severe ICP (bile acid $>40 \mu\text{mol/L}$) and 8 patient were mild ICP ($<40 \mu\text{mol/L}$). Of this 12 ICP patients one was triplet pregnancy and 2 were twin pregnancies. The incidence of PE in the singleton pregnancies who were diagnosed with ICP was %11.6. Inter-

Table 1. CVS indications and aneuploidy rates

CVS Indications	CVS Count	Aneuploidy Count	%
Nuchal thickness ≥ 3 mm	20	6	30,00
Fetal abnormality in ultrasonography	56	14	25,00
High risk in combined screening test	68	11	16,17
Aneuploidy history	19	0	0
Others	102	1	0,98
Total	265	32	12,07

Table 2. Association of maternal age, nuchal thickness and fetal abnormality in USG with aneuploidy

Parameters		N	Aneuploidy	%
Nuchal thickness	< 3 mm	245	25	9.80
Nuchal thickness	≥ 3 mm	20	6	30.00
Maternal age	<35	176	31	17.61
Maternal age	≥ 35	67	3	4.47
Fetal abnormality in USG	PRESENT	56	14	25.00
Fetal abnormality in USG	NONE	209	17	8.00

estingly of these 93 patients, 18 patients had proteinuria (24 hour urinary protein excretion ≥ 300 mg/day or urine dipstick testing result $> +1$ protein or spot urine protein/creatinine > 0.3) without hypertension and symptoms of end organ damage. None of ICP patients had seizure and diagnosed as eclampsia.

Conclusion: Preeclampsia complicates approximately 4.6% of all pregnancies worldwide. We found higher Incidence(12.9%) of PE in patients who were diagnosed with ICP. So it becomes important to suspect and evaluate preeclampsia criteria in all ICP patients to diagnose and treat this co-morbidity.

Keywords: ICP, intrahepatic cholestasis pregnancy, preeclampsia

[PP-275]

Transverse vaginal septum with successful pregnancy outcome

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Introduction: Transverse vaginal septum (TVS) is a rare condition characterized with vertical fusion disorder of müllerian duct and urogenital sinus. Incidence of TVS varies from 1:21000 to 1:72000 (1). The etiology is unknown (2). Septum can appear any portion of the vagina and can be transverse, longitudinal, or oblique. TVS may present as primary amenorrhea or dyspareunia. Ultrasound, MRI and hysteroscopy can be helpful for diagnose. Surgical intervention is first line treatment option for TVS. In this case we report a middle TVS who diagnosed during delivery with successful pregnancy outcome.

Case Report: A 22 year old primigravida woman at 39 weeks and 1 day of gestation was admitted to the emergency unit with pelvic pain. Her medical history were normal. She was married for 12 months and doesn't complain of dyspareunia. She had regular menstrual cycles.

Her vaginal examination with a speculum showed vagina was blind ended and there is a middle transverse vaginal septum (Figure 1). Cervix was not visible (Figure 2).

Her ultrasound examination showed that her baby was termed, amniotic fluid was normal and she was in labor with breech presentation (Figure 3). Lower segment cesarean section was planned to the patient because of breech presentation. In intraoperative exploration uterus, tubas and ovaries were normal. After the c-section vaginal septum incised with a needle point diathermy. After the incision we excised the septum in four quadrants (Figure 4). The post-operative period was uneventful and the patient and her baby were discharged at postoperative 2nd day. Vaginal examination 6 weeks after operation showed a normal vaginal pouch.

Conclusion: The isolated transverse vaginal septum is one of the most infrequent müllerian anomalies which may be associated with imperforate hymen, imperforate anus, ectopic ureter, vesicovaginal fistula, bicornuate uterus, and septate uterus. However, associated abnormalities may include coarctation of the aorta, atrial septal defect and malformations of the lumbar spine (3). Lodi states that the septum can be at any level in the vagina – approximately 46% being found in the upper vagina, 40% in the mid vagina and 14% in the lower vagina (4).

The aetiology of transverse vaginal septum is unknown but it represents a vertical fusion disorder between the müllerian ducts and

the urogenital sinus. Most of the TVS patients are asymptomatic until the time of menarche (5). Presentations after menarche may be hypomenorrhea, dyspareunia and dysmenorrhea depending on whether septum is complete or incomplete. In this case the patient was asymptomatic until labor. Complete transverse vaginal septa may present with pelvic pain in prepubertal girls because of accumulation of fluid (2).

Excision is the main treatment for TVS. Excision of TVS is associated with a high rate of vaginal stenosis which may require a repeat procedure (2). Options for surgical repair depend on the thickness and position of the septum. Premenarchal gynecological examination is necessary for early diagnosis of TVS. Strict follow up should be underlined because TVS has a higher risk of re-occlusion leading to recurrence of symptoms.

Keywords: Müllerian anomaly, pregnancy, transverse vaginal septum



Figure 1. Transverse vaginal septum

[PP-277]

Premenopausal pelvic mass due to hematometra

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Introduction: Hematometra is the accumulation of the menstrual fluid in uterine cavity by the obstruction of the lower female genital tract(1). Congenital abnormalities, senile atrophy of endocervical canal, synechiae, radiation, conization and endocervical malignancies may lead to obstruction(2,3). Patients typically present with dysmenorrhoea, reduced or absent menstrual flow or abdominal distension from haematometra. We report a case of premenopausal cervical stenosis with secondary haematometra with none of the conditions mentioned above exists.

Case: A 44-year-old multigravida premenopausal woman with a history of three vaginal delivery presented as an emergency with acute generalized severe abdominal pain. Her menstrual cycle was regular and she had no vaginal or abdominal surgery before. The patient also complained of suddenly reduced flow and stopped bleeding on the third day of last menstrual period. The blood pregnancy test was negative. The vitals were stable. Per abdominal examination revealed tenderness in all abdomen especially the bilateral iliac fossa. A mass was determined extending down below the umbilicus. On bimanual examination, uterus was approximately the eighteen weeks of gestation size. Per speculum examination showed normal anatomy of cervix. The cervical os can be visualized normally but per vaginal examination revealed extreme tenderness on movement of the cervix. On emergency transabdominal ultrasound of the pelvis and computed tomography scan of and pelvis revealed an enlarged uterus. There was an hyperechoic collection within the endometrial cavity. Attempts at dilation of the cervix with Hegar until number 5, begin glide of dark and dense blood approximately in 300 ml. The patient underwent endometrial sampling. The patient was discharged the next day uneventfully. Histopathological examination of the specimen showed normal endometrial cells.

Discussion: In conclusion sudden reduce or stop in menstrual fluid followed by a severe abdominal pain in premenopausal period may indicate a possible hematometra. Ultrasonography, combined with physical examination were very helpful in determining the diagnosis.

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Keywords: Hematometra, premenopausal, pelvic pain

[PP-278]

A case of trocar site hernia masked by cholecystitis

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Introduction: Compared with open abdominal surgery, laparoscopy has several better outcomes including less pain, faster recovery, and hernia formation. Although data is misleading, retrospective studies have suggested that trocar site hernia (TSH) is an uncommon status after laparoscopic surgery. We present an interesting case of TSH initially masked by acute cholecystitis.

Case: A-43 year old premenarchal patient was admitted for planned laparoscopic surgery because of persistent left ovarian cyst and right hydrosalpinx. Her medical history was unremarkable with no previous surgery and systemic disease. The operation was completed without any intraoperative complications, and left salpingo-oophorectomy and right salpingectomy were performed. She was discharged without any complications on the second postoperative day. The patient was admitted to the emergency department with a complaint of worsening nausea and vomiting 2 days after discharge. Her initial gynecological pelvic examination presented no special characteristics with soft abdomen, bowel sounds on 4 quadrants, and normal passage of flatus. The patient defined tenderness only in the epigastrium and right upper quadrant, but no fever. While abdominal radiographs were normal, laboratory investigations indicated elevated levels of liver enzymes and direct and total bilirubins. Abdominopelvic ultrasound scan revealed biliary sludge, and cholecystitis was determined as the primary diagnosis. According to the suggestions of general surgery, conservative treatment with antibiotics and intravenous fluids were begun and were given nothing by mouth. The patient defined a good state after 3 days of follow-up with decline in laboratory tests. As oral intake was allowed, liver enzymes (aspartate aminotransferase, alanine aminotransferase) increased up to 153 IU/L and 269 IU/L on the following day, respectively. Although the abdomen was soft on the examination, repeat abdominal X-ray revealed air-fluid levels in the epigastrium and right upper quadrant. Although normal passage of flatus was present, no defecation had occurred until hospitalization. No attacks of pain or vomiting were observed, but the patient was restless about the condition. In the light of the secondary findings, ultrasound examination was performed, and a segment of intestine was seen to be herniated from the umbilical port insertion. An emergency laparotomy was performed, and adherent bowel segment in the umbilical port insertion and omentum adjacent to the left trocar insertion were dissected and recovered. The postoperative period was uneventful, she was discharged on the third postoperative day.

Discussion: Acute postoperative cholecystitis is a rare finding and mostly related to surgery involving gastrointestinal system. The diagnosis is mostly based on clinical findings and confirmed by ultrasound. The follow up is mostly conservative, but even a secondary surgery for cholecystectomy may be scheduled. Port site herniation is slightly more common than cholecystitis, and needs to be managed by surgery. The present case is an interesting example of coexistence

of two emergency conditions that the surgeon should reconsider all the situations in postoperative evaluation in detail.

Keywords: Cholecystitis, trocar site hernia

[PP-279]

Trauma-caused postpartum ruptured leiomyoma: A case report

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Introduction: The prevalence of leiomyoma during pregnancy is reported as approximately 2%. The complications of leiomyomas during pregnancy are very rare and can be divided into those occurring during pregnancy, at delivery and in puerperium. Spontaneous rupture of uterine leiomyoma is extremely rare. In most cases trauma or torsion causes the bleeding. In this case suprapubic pressure is the reason that caused the trauma which leded bleeding.

Case: A23-year-old multiparous woman, gravida 2 para 1, who presented with weakness, worsening lower abdominal pain and decreasing hematocrit at 4 days postpartum. The patient had a known leiomyoma. Patient had a vaginal delivery complicated by shoulder dystocia Suprapubic pressure and McRoberts maneuver were performed during delivery. She delivered 3920 g baby girl with a 1 and 5 minutes apgars 5 and 9 respectively. Upon postoperative day 4, patient complained of abdominal pain. Physical exam findings were significant for diffuse abdominal tenderness with guarding and rebound tenderness located in the suprapubic area and in both iliac fossae. On Ultrasound of the pelvis and Computed tomography scan of the abdomen and pelvis revealed 13×9×12 cm sized hyperechoic and cystic mass located on the anterior wall of the uterus. A large amount of fluid was visible in the paracolic gutters and the Pouch of Douglas consistent with hematoma. The patient underwent an exploratory laparotomy. A ruptured, torsioned, subserosal, nonpedunculated, cystic degenerated uterine fibroid which was actively bleeding was found, as well as approximately two liters of free, bloodstained peritoneal fluid. Myomectomy was performed, followed by evacuation of the fluid and clots. The patient's postoperative course was uneventful. Histopathology confirmed a benign leiomyoma with areas of bleeding and cystic changes. These findings were interpreted as a rupture of uterine fibroid after cystic degeneration.

Discussion: In conclusion, if the patient has a leiomyoma it could either be ruptured spontaneously or due to the trauma as suprapubic pressure during delivery. This is the first case report about a ruptured leiomyoma that occurred during the delivery because of a external trauma. Exploratory laparotomy is both diagnostic and therapeutic in this rare, life-threatening condition.

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Keywords: Leiomyoma, postpartum, abdominal pain

[PP-280]

Myomectomy during cesarean section: A case report

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Introduction: Leiomyoma uteri are the most common gynecologic tumors. The estimated prevalence of fibroids in pregnancy is 2%. Myomectomy during cesarean section is an easy and safe procedure when done appropriately. In this case we want to present the successful management of giant myomectomy during cesarean section in thirty one year old primigravide, 37 week pregnant women.

Case: A 31 years old 37 weeks pregnant nullipara patient administered to our hospital with stomach ache. Obstetric ultrasonogram showed single live fetus in breach presentation which was correspondent to last menstrual period. Amniotik fluid was enough and placenta was fundus located. It also showed 15*10 cm subserosal fibroid in the anterior wall of the uterus. In cervical examination cervix was dilated 2-3 cm, effaced 40% and amniotic members were intact. In her history 28th and 32nd of gestational weeks patient was hospitalized and had medical treatment for preterm labor. She was taken for cesarean section due to breach presentation. After the extraction of a live singleton baby with a weight of 3260 gr, uterus was taken outside of the west. We saw 15*10 cm subserosal fibroid



Figure 1. Giant subserosal fibroid



Figure 2. Uterus and fibroid after myomectomy

which has connected to left uterine horn in anterior wall of uterus with 5cm wide stalk (Figure 1). Kerr Incision was primarily closed. After that, a decision was taken to perform a myomectomy. In order to limit the bleeding we put a circular suture between uterus and fibroid. Myomectomy has done 1 cm above that suture (Figure 2). No bleeding was observed. There was no intraoperative complication. She was discharged from hospital 3rd postoperative day. Histopathological examination reported as leiomyoma of 16*11 cm in diameter and 2800 gr weight.

Conclusion: Myomectomy during cesarean section, is a viable option in selected patients. However, it should be discussed in detail with the patient.

Keywords: Cesarean section, haemorrhage, myoma, uterine

[PP-282]

An unusual mesh erosion after trans-obturator tape replacement

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Introduction: The transobturator tape (TOT) sling procedure is a variation of the midurethral sling procedures and gaining popularity. Mesh-related complication rate after transvaginal mesh application is about 15-25% and mesh erosion is up to 10% for these indications. Synthetic non-absorbable polypropylene mesh has become the dominant reconstructive material for gynecologic surgery. Novel complications from mesh became apparent in years. Patients may present with mesh exposure, rejection, vaginal bleeding, pelvic pain, dyspareunia, and partner irritation during sex. More than 30,000 vaginal mesh related complication reported in United States recently.

Most of the mesh erosion areas located under the urethra. Mesh erosion at thigh incision area is very rare. We presented an unusual case, unilateral mesh erosion at thigh incision area and its management.

Case Presentation: Fifty-five years old, parity five woman admitted to our clinic for mesh exposure at left thigh incision area. She had transobturator tape replacement surgery for SUI three years ago in her medical history. She had no any other medical condition. After physical examination we saw the mesh at left thigh incision area (Figure 1a). There was a granulomatous skin reaction around the incision area. After the evaluation we offered wound revision to patient.

At the operation, the woman was placed in the lithotomy position and we inject the local anesthetic around the erosion area. After that we excised the granulomatous reaction area with ten blade (Figure 1b). We stopped the excision when we reached the healthy skin. After that we cut the 1 cm protruding part of the polypropylene mesh. The thigh incision is closed in a running fashion with 2-0 delayed-absorbable suture (Figure 1c). Patient was discharged from hospital at the same day. Two weeks after intervention wound fully recovered. Two months after intervention no mesh erosion observed at thigh incision area (Figure 1d).

Discussion: Urinary incontinence is defined as involuntary leakage of urine. Approximately half of the women complain from urinary incontinence. Usage of synthetic mesh during SUI surgery is being used increasingly in hopes of achieving more durable improvement. Mesh related complication became more often in last decade. American Food and Drug Administration warned about possible complication of transvaginal meshes in 2011. Erosion through tissue planes is the principal obstacle in mesh based repair. Real prevalence of mesh related complications is unknown. Most complications of mesh surgery occurs one to five years after surgery. A careful clinical examination, imaging and cystoscopy are required for the diagnosis and determine the management strategy of mesh erosion. Main management method for mesh erosion is local estrogen therapy and mesh resection. However removal of the mesh was more difficult if the initial operation has been long ago.

Mesh-related complications are a growing problem for gynecologists in their daily practice. Previous studies showed that, Surgical intervention looks advantageous. In this case we reported a mesh erosion at thigh incision area. New developments in mesh material optimization are currently expected. The single incision mini-slings can avoid most of the thigh incision related complications.

Keywords: Complication, erosion, incontinence, mesh

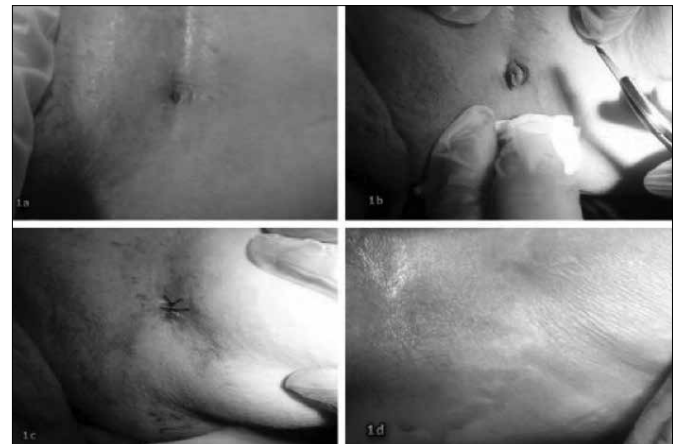


Figure 1. Mesh erosion at thigh incision area (a), local excision of mesh erosion area (b), erosion area after repairment (c), thigh incision area after 2 months (d)

[PP-283]

The impact of prognostic factors on recurrence in early stage endometrial cancer

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Objective: To assess the clinical and pathologic risk factors for recurrence of early stage endometrial cancer.

Material and Methods: All patients with FIGO stage 1 endometrial adenocarcinoma who were treated surgically at a university based gynecologic oncology clinic between January 2011 and December 2014 were recruited in this single center retrospective cohort study. Patients with uterine malignancies other than endometrial adenocarcinoma were excluded. Data regarding clinical and pathologic risk factors were recorded. The pathology slides from the staging surgeries were re-evaluated microscopically by a gynecologic pathologist for all parameters along with lymphovascular space invasion (LVSI).

Results: A total of 309 patients with endometrial cancer were assessed for eligibility. Among those, 219 were diagnosed with stage 1 endometrial cancer and included in the present analyses. The median follow-up duration was 42 months. Eight (3.65%) patients had recurrence (2 local recurrences, 6 distant recurrences). None of the patients died during follow-up. Of the patients with recurrence 5 (62.5%) had LVSI and 51 (24.2%) out of 211 patients without recurrence had LVSI ($p=0.028$). The other parameters were comparable between the study and control groups (Table 1). When adjusted for age, the logistic regression analysis revealed that LVSI was the only statistically significant predictor for recurrence (OR 7.51; 95% CI 1.40-40, $p=0.018$) (Table 2).

Table 1. Recurrence risk factors in early stage endometrial cancer

	Recurrence + (n=8)	No recurrence (n=211)	P
Age	65.5±12.9	60.7±10.9	0.255
CA-125	40.2±62.5	25.6±68.6	0.579
LVSI +	5 (62.5%)	51 (24.2%)	0.028
Myometrial invasion (>=50%)	4 (50%)	76 (36%)	0.467
Cervical invasion	2/7 (28.6%)	13/167 (7.8%)	0.113
Grade 1	1 (12.5%)	64 (30.5%)	0.076
Grade 2	114 (54.3%)	3 (37.5%)	0.076
Grade 3	32 (15.2%)	4 (50%)	0.076
Non-endometrioid	1 (12.5%)	6 (2.8%)	0.232
Tumor size (>=2 cm)	4/7 (57.1%)	112/170 (65.9%)	0.779

Table 2. Logistic regression analysis (backward LR) for recurrence risk in early stage endometrial cancer (Adjusted for age)

	OR	95% CI	p
LVSI	7.51	1.40-40	0.018

Conclusion: LVSI is an independent predictor of recurrence in early stage endometrial cancer. So, it should be evaluated while making decision for postoperative management even in stage 1 patients. Patients with LVSI should be carefully and frequently followed-up

Keywords: Endometrial cancer, prognostic factor, recurrence

[PP-284]

Prenatal diagnosis of horseshoe kidney

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Introduction: The horseshoe kidney results from fusion of the upper or lower poles of two distinct functioning kidneys to produce a horseshoe shaped organ that is contiguous across the midline anterior to the aorta and inferior vena cava.

- It is the most common renal fusion abnormality occurring in 1 in 500 persons.
- As with other fusion anomalies, it is more common in males.
- In this anomaly, the poles of the 2 kidneys are fused, usually the lower poles.
 - 90% are fused at the lower pole and 10% are fused at the upper pole.
 - The isthmus prevents normal renal rotation.
 - It has its own blood supply.
 - The usual position of the isthmus is at the junction of the aorta with the inferior mesenteric artery.
 - The ureters usually exit the anteriorly positioned renal pelves to descend inferiorly

Case Report: 31 years old, gravida 3, parity 2 patient is admitted. Fetal biometry was compatible with 22-23 weeks old pregnancy. In the ultrasound examination left fetal kidney was localized down. Fusion between the kidneys is detected at the lower poles of both fetal kidneys anterior to the vertebral colon. These findings was compatible with fetal horseshoe kidney. Magnetic resonance imaging is performed for the patient to verify the diagnosis.

MRI Results: In the evaluation for fetal kidneys, right fetal kidney is visualized at normal localization, left kidney is visualized forming axis of rotation at midline, paravertebrally and lower poles of both kidneys were fused. These findings are compatible with horseshoe kidney. Patient is discussed in the our council and chorionicentesis is recommended for fetal karyotyping.

Karyotype: Normal

Conclusion: Horseshoe kidney can be accompanied by other genitourinary anomalies, such as vesicoureteral reflux (50%), duplication of ureters (10%), hypospadias and undescended testis (4%), and bicornuate or septate uterus (7%). Horseshoe kidney is also frequently found in association with other congenital anomalies. Most commonly affected organs are cardiovascular, skeletal, and central nervous systems. Horseshoe kidneys are associated with fetal syndromes such as Turner syndrome, trisomy 18 and trisomy 9. The early prenatal detection of horseshoe kidney can help in the diagnosis and management



Figure 1. Ultrasound Figure



Figure 2. Ultrasound Figure

of the associated anomalies and fetal syndromes.

Keywords: Horseshoe kidney

[PP-286]

Effectiveness of home exercise in pregnant women with carpal tunnel syndrome

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Objective: Carpal tunnel syndrome (CTS) is the most common entrapment neuropathies. It may be seen in pregnancy especially after the second trimester. Therefore this study was designed to evaluate the effectiveness of home exercise in pregnant women with carpal tunnel syndrome.

Introduction: Most of carpal tunnel syndrome cases are idiopathic. Other causes are systemic disorders, local factors and excessive use / efforts required factors. Patient history is required for diagnosis, physical examination and electroneuromyography. Patients often complain of numbness, tingling and pain on 3rd and 5th finger in the radial side. Typically, patients who wake up at night with a numb hand. On physical examination, in the median sensory hypoesthesia, positive provocative tests and tenor muscles weakness and atrophy. Prolonged latency is the typical findings in nerve conduction velocity studies. Conservative treatment includes the rest, nonsteroidal anti-inflammatory drugs, neutral position splints, and steroid injections.

Material and Methods: Demographic data was recorded, carpal tunnel syndrome was examined and EMG recordings were obtained from 33 pregnant who applied to Bezmialem Vakıf University Gynecology and Obstetrics polyclinics. In our study, the mean body mass index and the mean age were 28.84 ± 3.62 and 28 ± 4.67 , respectively. Relevant forms were created by the face to face interviews. These forms included demographic information, smoking and alcohol use, concomitant diseases, and duration of symptoms. Four weeks of home exercise program was given to pregnant women with carpal tunnel syndrome, and the effectiveness of this therapy was evaluated by Boston Carpal Tunnel Syndrome Survey and Functional Capacity Scale.

Results: According to the EMG recordings, 1 patient had CTS on the left, 9 patients had CTS on the right, 9 patients had bilateral CTS, and 14 patients had no CTS (normal). A significant improvement ($P < 0.05$) was observed on the CTSs of patients after the exercise program according to the Boston Carpal Tunnel Syndrome Survey and Functional Capacity Scale.

Conclusion: It has been concluded that the carpal tunnel syndrome exercises may induce a positive improvement in the functionality of the pregnant patients.

Keywords: Carpal tunnel syndrome, pregnant, exercise

[PP-287]

Primigravid women with cervical ectopic pregnancy: treatment with methotrexate

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Introduction: Cervical pregnancy, which the pregnancy implants in the lining of the endocervical canal, the incidence is approximately 1/9000 deliveries. It is a rare form of ectopic pregnancy accounts for less than 1% of ectopic pregnancies. Cervical pregnancy may occur more common in pregnancies achieved through assisted reproduc-

tive technologies. The cause is unknown; previous cervical or uterine surgery or rapid transport of the fertilized ovum together with unreceptive endometrium may play a role. Medical treatment can be used in hemodynamically stable women. The medical treatment option is methotrexate (MTX) therapy with or without intraamniotic and/or intrafetal injection of local potassium chloride (KCl) (eg, intracardiac injection of about 5 mEq KCL) when fetal cardiac activity is present. Severe hemorrhage and need for hysterectomy can be avoided if it is diagnosed and treated early. Surgical therapy is an option for hemodynamically unstable women and preoperative uterine arterial embolization followed by dilation and evacuation is a better option.

Case Report: A 21 year-old woman, gravida 1, presented to the outpatient clinic with 4 weeks of amenorrhoea. β -hCG level was 566 mIU/mL. In transvaginal sonography; uterus, ovaries were normal. After being informed about her pregnancy, the patient didn't show up for her follow-up examination. 11 days after her first examination she applied to our clinic without any complaint. She was haemodynamically stable with haemoglobin of 12.4 g/dL, β -hCG level was 3539 mIU/mL. In vaginal examination; external os was closed, uterus size was detected normal without any adnexial mass or tenderness. Transvaginal sonography findings were; a gestational sac 7.2x4.8 mm without a fetal pole in cervical canal implanted distal to the closed internal os with an empty endometrial cavity. Bilateral tubes and ovaries were normal. We planed a conservative management for this case and a single dose regimen of methotrexate (50 mg/m²) was administered via intramuscular injection. On the fourth day of the treatment, β -hCG level was 5468 mIU/mL and transvaginal sonography revealed a 5,3x5,9 mm echogenic mass in the cervical canal. On the seventh day, β -hCG level was 2259 mIU/mL and transvaginal sonography revealed a 5,0x5,7 mm echogenic mass in the cervical canal. Transvaginal sonography on the tenth day; revealed a 4x3 mm echogenic mass and the patient had minimal vaginal bleeding. Afterwards patient failed to show up for further examination. Three weeks after the methotrexate regimen, when she applied again, her β -hCG level was <1.20 mIU/mL and she had mild vaginal bleeding

one. Transvaginal sonography revealed that uterus, bilateral ovaries, cervical canal were normal.

Conclusion: Systemic methotrexate, administered intramuscularly, with/without intraamniotic and/or intrafetal injection of local KCl is an option for hemodynamically stable patients of cervical pregnancy. When surgical therapy is needed, preoperative uterine arterial embolization followed by dilation and evacuation is a better option. If it isn't possible, ligation of the descending branch of the uterine artery prior to dilation and evacuation and placement of a balloon catheter to tamponade implantation site after evacuation is the other option.

Keywords: Cervical ectopic pregnancy, methotrexate, serum b-HCG

[PP-288]

Rarely occurred a postmenaposal choriocarcinoma: case report

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Introduction: Choriocarcinoma is high grade malignant epithelial tumor originated from trophoblasts, and it is seen generally in childbearing age. And postmenopausal chorocarcinoma is quite rare. In literature, it has been mentioned that these lesions can be shown even years after the hysterectomy and menopause.

Case Report: 52 years old, G4 P4 patient consulted to Medical Oncology because of bulk in uterus, vaginal bleeding and respiratory disorder complaints. In PET/CT, 6x7 cm bulk and multiple lung metastasis has been detected. After our endometrial biopsy test, we found the choriocarcinoma. Therewith, performed b-HCG value was detected as 632,264 and EMA/CO protocol was implemented to the patient. After patient went into remission, laparoscopic hysterectomy and bilateral salpingo-oophorectomy performed. We determined last b-HCG value of the patient as 4. Patient is still followed up in our clinic. No any recurrence has been reported yet.

Conclusion: Although, choriocarcinoma seems to be typical to childbearing age, it can be shown in any period of the life. Choriocarcinoma also should be considered among the postmenopausal bleeding reasons and patients should be tested in this regard.

Keywords: Postmenopause, choriocarcinoma

[PP-290]

Ovarian tumors during of pregnancy; presentation of two cases, diagnosis and treatment

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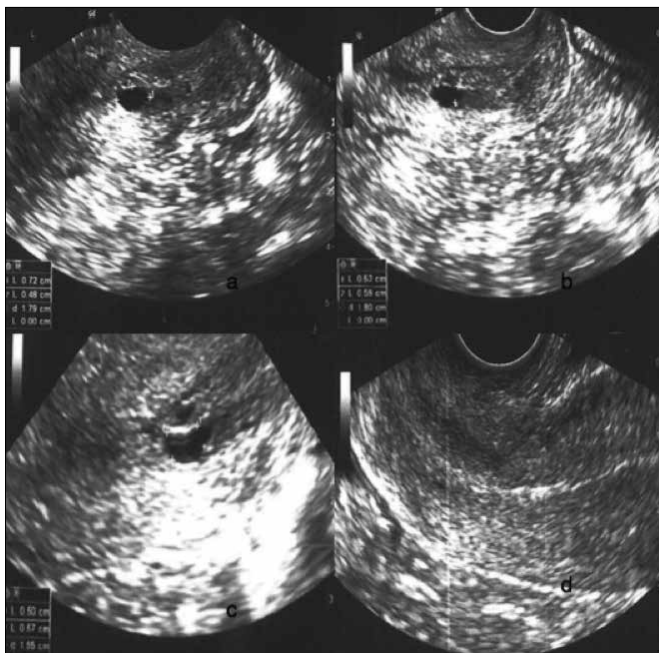


Figure 1. a: Methotrexate 1. day b: Methotrexate 4. day c: Methotrexate 7. day d: 4 weeks after the methotrexate regimen

Ovarian cancers are rare during pregnancy. Diagnosis and the management is difficult. Generally most patients are clinically asymptomatic and diagnosis is often based on first trimester routine USG examination. MRI is useful for diagnosis. Tumour markers can't be reliable, because are increased during pregnancy.

Our first case, is a 34-year-old Gravida 2, Para 1 patient presented with adnexial mass. The mass septated cystic lesion and solid component measuring approximately 18x16cm. It was detected during the examination at 6th week of gestation, Magnetic Resonance Imaging control, showed us that the cyst had a complex structure. We decided to operation. The patient had left salpingo-oophorectomy, omentectomy and appendectomy. The Pathology result was Grade 2 immature teratoma. Then the patient was scheduled for chemotherapy. Before chemotherapy patient had cure incomplete abortion during treatment terminating the pregnancy. Cystic lesion observed at month 2 control and the patient underwent right salpingo-oophorectomy and total abdominal hysterectomy by definitive surgery due to suspected relapse. No tumoral tissue found during Pathologic assessment and the patient received adjuvant BEP (bleomycin, etoposide, and cisplatin) chemotherapy.

The second case involved a 20-years old Gravida 1 patient. She followed-up by an external clinic until 23rd week of gestation. The patient referred subsequently to our center upon preliminary diagnosis of pregnancy + myoma. In our clinic we have detected heterogeneous solid adnexal mass measuring 11 cm with hemorrhagic component was observed at uterus posterior. Upon scheduled operation, right salpingo-oophorectomy was performed and the tissue was sent to frozen section examination, which showed granulosa cell tumor. Salpingo-oophorectomy + Pelvic Paraaortic Lymph Node Dissection + omentectomy + appendectomy performed by staging surgery. Pathological assessment found a juvenile granulosa cell tumor limited to one ovary with intact capsule. The patient was scheduled to routine pregnancy follow-up. Patient delivered a 2,280g live baby girl at week 34th of gestation by cesarean.

Discussion: Ovary tumors are rare during gestation. Nevertheless, careful adnexal review is required especially during the early ultrasound examinations for avoidance of doubt. Suspected lesions measuring above 10cm with solid cystic components should be removed. Continuance of gestation does not impede the treatment of the patient but the management should be customized for each patient. Surgical treatment approach may vary by the age of the patient, week of gestation, and laparoscopic experience. Adequate surgery is important especially for early ovarian cancers. Moreover, surgical treatment alone may be sufficient for recovery. Requirement for a post-operative CT depends on the histological type. Chemotherapy is often required in advanced stages of cancers. CT should be administered from the 20th week of gestation in order to minimize postpartum or potential fetal risks, if possible.

Keywords: Adnexal mass, ovarian cancers during pregnancy

[PP-291]

A miad fetus with alobar holoprosencephaly and cyclopia: case report

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Objective: Alobar holoprosencephaly (HPE) is a rare, severe, complex human brain malformation. We describe a case of cyclopia with alobar HPE identified at 40 weeks of gestation by 2-dimensional (2D) and 3D transabdominal ultrasound (US).

Case Report: A 27-year-old woman, gravida 5, para 4, abortion 0, was referred to Sakarya University Department of Obstetrics and Gynecology at 40 weeks of gestation for sonography; she was experiencing labor pains and had a nonreactive non-stress test. The mother had received no regular antenatal care, and no sonography was performed during pregnancy. Both 2D and 3D US revealed alobar HPE and cyclopia. The baby was born by vaginal delivery shortly thereafter and then died after birth. On examination, the face had a single large median eye with eyelash, micrognathia and no nose (Figure 1, 2).

Conclusion: Alobar HPE and cyclopia can be diagnosed by US early during pregnancy. Early diagnosis is important to allow for early termination of pregnancy and to minimize the physiological and psychological impact of such anomalies on the mother and family.

Keywords: Alobar Holoprosencephaly, cyclopia, diagnosis, ultrasonography

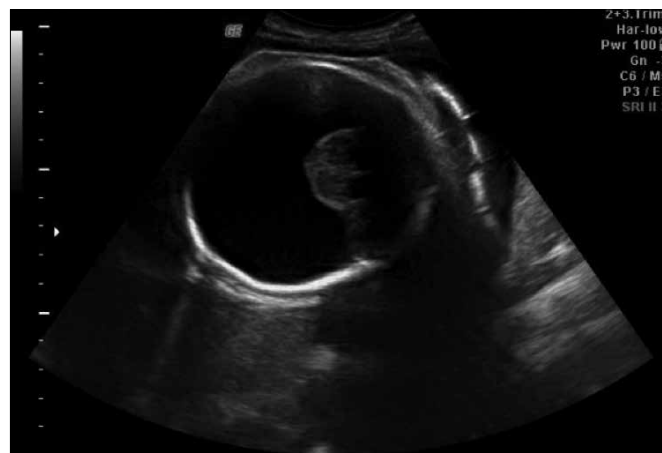


Figure 1. 2D Ultrasoundy photo



Figure 2. A miad fetus with cyclopia

[PP-292]

Non-ruptured twin cornual ectopic pregnancy: case report

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Introduction: Cornual pregnancy is a rare form that constitutes of 2-4% of all ectopic pregnancies. Compared to tubal ectopic pregnancies, cornual pregnancies rupture at a later period because the myometrium is more distensible than the tuba uterina. The morbidity and the mortality are related directly to the time of diagnosis.

Case Report: 40 years old women with gravida 4, parite 3, abortus 0 and has no previous surgery

attended to our clinic with a complaint of vaginal bleeding and delay of menses. The patient's last menstrual period was 2 months ago and serum b-HCG levels was 22709 mIU/mL. On clinical examination, the abdomen was mildly tender and there was a little vaginal bleeding. Blood count and biochemical blood tests were normal. On obstetric ultrasound examination, intact dichorionic/diamniotic twin ectopic pregnancy was detected on left cornual region (figure 1) and laparoscopy was arranged. On laparoscopic observation there was a big non-ruptured and highly vascularized focus (Figure 2). Because of high risk of bleeding, laparotomy was performed. Cornual resection was carried out and uterus was repaired completely. The patient was discharged on first day postoperatively and no complication was observed.

Conclusion: Cornual ectopic pregnancy is an important situation that must be diagnosed early and its treatment should be planned carefully. Early diagnosis and treatment will decrease the mortality and the morbidity rate of the patient.

Keywords: Cornual ectopic pregnancy, twin

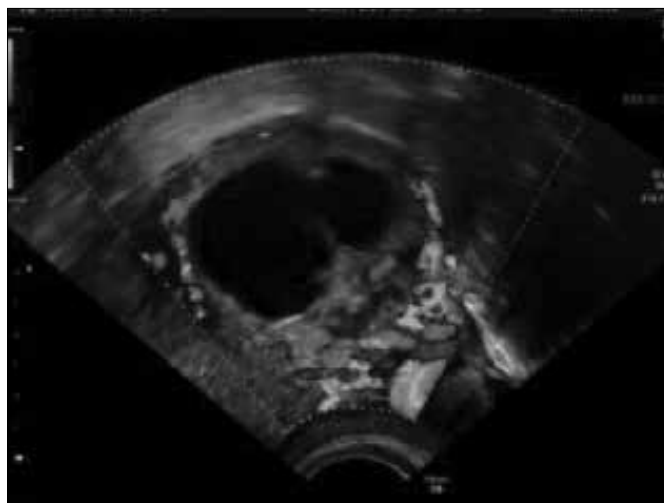


Figure 1. Colour doppler sonography of ectopic pregnancy



Figure 2. Left cornual ectopic pregnancy

[PP-293]

Effect of metformin on the thyroid function in pregnant women with PCOS

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PCOS is the most common endocrine disorder occurring in women during the reproductive age, with a prevalence of 6 to 15%, although it varies by different diagnostic criteria. The prevalence of thyroid diseases and subclinical hypothyroidism during gestation is 1-2% and 2-5%, respectively. It is well-established that PCOS and hypothyroidism are associated with adverse pregnancy outcomes, yet there is limited information as regards the effect of metformin treatment on thyroid hormones in pregnant women with PCOS.

Objective: The aim of the present study was to ascertain the prevalence of manifest and subclinical hypothyroidism in pregnant women with PCOS, who presented to our clinic, and to investigate the effect of metformin on TSH and fT4 in metformin-administered pregnant women.

Material and Methods: Gravida 1 women, who presented to our clinic, aging 18 to 40 years, were enrolled in the study after signed consent forms were obtained. The manifest and subclinical hypothyroidism prevalence was investigated in 144 pregnant women enrolled in the study by trimestral measurement of serum TSH and fT4 levels. Pregnant women with PCOS, who were diagnosed with manifest and subclinical hypothyroidism, were randomized to two study groups of metformin 850mg/day 2x1 and placebo. Thyroid function tests were analyzed throughout the gestation.

Results: In the present study, the prevalence of manifest and subclinical hypothyroidism in pregnant women with PCOS, who presented to our clinic, was 1.4% and 8.4%, respectively. The TSH levels of pregnant

women with PCOS, who were diagnosed with subclinical hypothyroidism but not on levothyroxine, were compared to the metformin and placebo groups throughout the gestation. The fT4 level significantly increased during the 2nd and 3rd trimesters (still within normal limits). Compared to the placebo group, the metformin group was found $p<0.001$, $p<0.05$, respectively.

The fT4 levels at 3rd trimester were significantly higher in pregnant women on levothyroxine treatment in the metformin group compared to placebo ($p<0.05$).

Conclusion: The high prevalence of subclinical hypothyroidism in pregnant women with PCOS suggested that management of those pregnant women should be conducted more in detail during the early weeks of gestation. Moreover, there is a need for further studies on the clinical significance of high fT4 levels in the metformin group.

Keywords: Metformin, PCOS, thyroid function in pregnancy

[PP-294]

Ovarian ectopic pregnancy with contralateral dermoid cyst: case report

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Introduction: Implantation of fertilized ovum outside the endometrial cavity is called ectopic pregnancy. The most frequent sides of involvement is fallopian tube and ampuller segment of tube. Primary ovarian pregnancy is a rare condition and preoperative diagnosis is extremely hard. 1 ovarian pregnancy per 2300 – 7000 spontaneous pregnancies occur and that establishes 3% of all ectopic pregnancies. Ovarian pregnancies are likely to occur because of retention of ovum on the ovary and fertilization and implantation on the peritoneal cavity. The diagnosis is based on the four criteria described by Spiegelberg at 1878. These are; tubal fimbriae are intact and easily distinguished from ovary; gestational sac located at ovary which lies at its normal location; sac is bound to uterus by utero-ovarian ligament and ovarian tissue found on the sac wall. Primary ectopic pregnancies establishes 1-3% of all ectopic pregnancies. Currently the incidence has been increased due to reproductive techniques and intrauterine devices. Oophorectomy has been accepted as the primary surgical approach, but currently wedge resection and cystectomy are primary approaches. Another option is methotrexate treatment with available patients. An ectopic pregnancy case managed at our clinic has been reported at that report.

Case Report: 29 years old (G2P1) patient admitted to our clinic with lower abdominal pain and 40 days of menstrual delay. Abdominal examination revealed a discomfort on right adnexial area without any acute abdomen sign. Cervical tenderness without any vaginal bleeding was observed on cervicovaginal examination. Ultrasonographic examination has showed an antevert uterus and endometrium with a thickness of 17 mms. At the lower tip of adnexial area 19*14 mm echogenic material which was consisting a 5 mm fetal pole with fetal heart beat. 47*28 mms of dermoid cyst was also existing on right



Figure 1. 2D Ultrasography photo

ovary. Left ovary seemed to be normal. Beta-hcg value was 5109. A laparoscopy section has been planned with a diagnosis of ovarian ectopic pregnancy. Laparoscopic observation revealed normal sized uterus, bilateral tubas and left ovary in normal nature. 3cms of ectopic pregnancy material was spotted on right ovary. Also the 4 cms of dermoid cyst was observed on left ovary as determined by ultrasonography (Figure1). Ectopic pregnancy material was excised from the ovary and cyst capsule was existed on the contralateral ovary. Pathologic investigation was also consistent with ectopic pregnancy. After the departure at third postoperative day, patient was directed to polyclinics for routine Hcg follow-up.

Conclusion: Ovarian ectopic pregnancies may be managed with early intervention, preoperative and even intraoperative diagnosis is challenging. Diagnosis is mostly done by pathologists after the surgery. Hallat and friends diagnosed ovarian ectopic pregnancies with a %28 accuracy at 25 patients. The other patients were diagnosed by pathologists. In conclusion, with reproductive treatments ectopic pregnancies has an increasing incidence. Recently, despite modern diagnostic techniques many patients are admitting with signs of hemorrhagic shock. With the high susceptibility of ovarian ectopic pregnancy, earlier interventions may provide possibility of ovary sparing surgery.

Keywords: Ovarian ectopic pregnancy, dermoid cyst, laparoscopic surgery

[PP-296]

A rare mullerian duct anomaly not included in the classification system by the american society for reproductive medicine: case report

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Introduction: Mullerian duct anomalies are associated with infertility, and increase the rate of obstetric complications. These anomalies are

classified in 7 groups by the American Association of Reproductive Medicine (ASRM). However, there appears to be rare anomalies that do not comply with this classification. In our case report, we aimed to present a anomaly that detected late and not involved in this classification.

Case Report: Gravidity 0, 4 years married, 27-year-old patient was referred to our clinic because of chronic dyspareunia and primary infertility. There was no feature at the gynecological examination. In the patient's hysterosalpingography, there was a Gartner duct cyst extending to right inferolateral side; in the right tuba there was a incompletted opacification and septate uterus. After this, we planned operation. As a result of hysteroscopy and laparoscopy; longitudinal vaginal septum, double cervix and a single uterine cavity, which has a fundal septum. Complete longitudinal vaginal septum and cervical septum have been excised; the vagina and cervix was turned into a single channel. Hysteroscopic septum resection was performed. The patient was discharged without complications.

Conclusion: Although the vast majority of the Mullerian duct anomalies are involved in ASRM classification, there are rare anomalies that fall outside this classification. Large-scale assessment is important in infertile patients who has a suspicions of Mullerian duct anomaly

Keywords: Mullerian anomaly, infertility

[PP-298]

The association between first trimester uterine artery Doppler velocimetry indices and adverse perinatal outcomes in IVF cycles

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Objective: To evaluate if first trimester uterine artery Doppler velocimetry values may predict adverse perinatal outcomes in patients who conceived with IVF cycles.

Material and Methods: We evaluated pregnancies who conceived with IVF (group 1, n=62) and compared this subjects to control group (group 2, n=53) in terms of first trimester uterine artery doppler velocimetry results topredict adverse perinatal outcomes (delivery type, preterm birth, low birth weight, lower APGAR score and neonatal intensive care unit necessity).

Results: The mean age of the patients in group 1 were 29.9 ± 4.7 years and in group 2 were 27.2 ± 4.2 years. Gestational age at birth, first minute APGAR scores, NICU requirement ratios, birth weight, preterm birth ratios, abortion ratios, delivery type, LUASD, LUARI, RUASD, RUARI levels were statically significant difference between groups ($p < 0.05$). There was a positive correlation between LUASD, LUARI, RUASD, RUARI levels and preterm birth ratios, NICU requirement ratios in the study group. And also, birth weight showed a negative correlation in terms of LUASD, LUARI, RUASD and RUARI levels in the study group.

Conclusion: In first trimester uterine artery Doppler velocimetry indices including RI and S/D values are good parameters to predict adverse perinatal outcomes in IVF pregnancies.

Keywords: IVF pregnancy, adverse perinatal outcomes, Doppler indices

[PP-299]

Experimental models of Polycystic Ovary Syndrome

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Polycystic ovary syndrome (PCOS) is the most common endocrine metabolic disorder in reproductive aged women. PCOS has a multi-system presentation. The mechanisms involved in polycystic ovary formation and related metabolic dysfunction have not been fully understood, although many animal and human studies have been conducted. Different techniques were experimented on animals to induce PCOS. Chronologically, the experimental methods used in PCOS induction included dehydroepiandrosterone application, estradiol valerate injection, fetal androgen administration, antiprogesterone (RU486) application and letrozole use. All of these models were described in this review article. Experimental models for induction of PCOS are important in understanding the mechanisms underlying its physiopathology. Table 1 summarized the association between experimental PCOS models and human diagnostic traits of PCOS Hormonal imbalance during prenatal or postnatal periods may trigger the syndrome. Intraovarian sympathetic nerve stimulation via NE may alter the microenvironment and disturb folliculogenesis. Adiposity may be a co-factor, involved in the transformation of a functional ovary into a dysfunctional, cystic one. Despite many experimental studies on PCOS, the exact mechanism is not yet elucidated. Since it is a multifaceted disease and affects various systems, many other animal and human studies are needed.

Keywords: PCOS, Experimental animal models, rat

[PP-300]

Small-cell lung cancer metastasis to ovary

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Introduction: Metastatic ovary tumors are 10-30% of all ovary tumors. These, primary focus is frequently colon, appendix, breast and pancreas. Lung cancer metastasis to ovary is rarely in which that 0,3-0,4% for metastatic ovary tumors. This presentation prepared cause of small-cell lung cancer (SCLC) metastasis to ovary so rarely.

Case Report: The patient who 40-year-old came to general surgery clinics. The symptoms are swelling in the abdomen and mass. The mass which lie to umbilicus are detected in examination. The mass (60x65 mm) is which 180° degree-surrounded of descended aorta and lenfatic node (19x11 mm) that in the left paraaortic space are detected in the upper-abdomen computed tomography (CT). Also,

another a lobulated heterogenous solid mass (150x100x85 mm) which is maybe the left adnexal-originated and the fluid at pelvis are detected in the lower-abdomen CT. A malign lesion (100x70 mm) detected the mediastinal space which invading to pulmonary artery, esophagus, aorta and thoracic aorta, obliterated totally the left main bronch and cause of atelectasia the left-lower lobe in the contrasted thorax CT. The CA125: 216 U/mL, others marker are normal. The lesion at left-main bronch taken out with bronchoscopy and detected SCLC at pathology specimen. The patient took 3 cure Etoposide and Cisplatin for chemotherapy at medical oncology clinic. After chemotherapy, left-adnex originated mass detected, 200x135 mm in which lobule heterogenous-contrasted. Different mass (160x125x245 mm) lying to near upper of vesica from left renal hilus detected, the mass retained intensive Fludeoxyglucose (INN) at solid field and lymphatic nodes detected 20 mm in diameter of biggest of at left-paracolic space by positron emission tomography and CT. Lap-



Figure 1. The sectioned surface of solid mass has cystic, hemorrhagic and necrotic areas. The black arrow shows necrosis

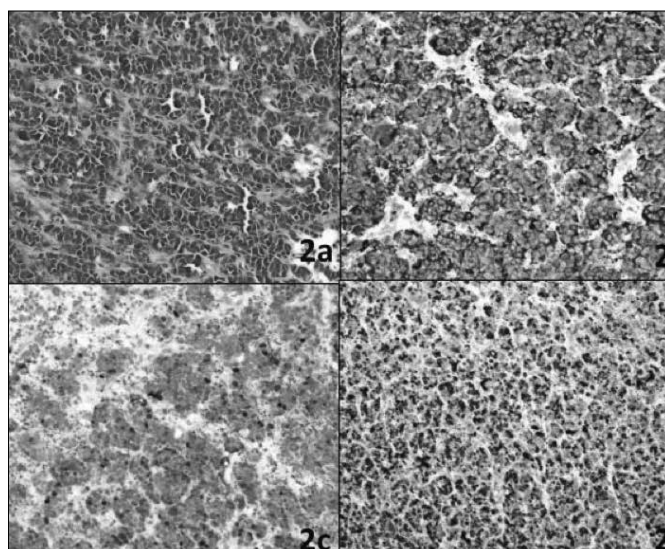


Figure 2. (a) Atypical tumoral cells with very scant cytoplasm and round to oval hyperchromatic, pleomorphic nuclei (HEEx200) (b): Immunohistochemical Chromogranin A expression of numerous tumoral cells. (c): Immunohistochemical nuclear TTF1 expression of some tumoral cells (d): Ki67 proliferation index is 60% indicating high grade tumor

arotomy applied for diagnosed-adnexial mass. Frozen specimen of the solid mass was SCLC metastasis. Biopsy applied for total hysterectomy, salpingo-oophorectomy, paraaortic lymphadenectomy, omentectomy and abdominal surface. Neuroendocrinal SCLC detected in the paraaortic lymph node and left ovary at pathology specimen.

Conclusion: Lung cancer metastasized typically to brain, bone, liver and adrenal gland. Cancer metastasized to ovary is rarely and frequently small cell cancers. The lung cancer is second in the women but cancer mortality rate is first. Statistically lung cancer have upward trend so that the cancer ovary metastasis rising is thinkable. Ovarian and lung malignancy have taking into consideration when detecting adnexial and thoracic mass by imaging methods.

Keywords: Small-cell lung cancer, metastatic ovarian tumors

[PP-302]

Vaginal endometriotic cyst; a case report

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Endometriosis is the ectopic implantation of endometrial tissue outside the uterine cavity. Vaginal endometrioma is rare and the following report describes one case of vaginal endometrioma.

A 43-year-old multiparous woman was admitted to our gynecology department with the complaints of vaginal pain that vary with menstrual period. Pelvic examination revealed 4 cm cyst at anterior vaginal wall, antero-lateral to the cervix. The ovaries were normal, examined by transvaginal ultrasonography. The patient underwent excision of the cyst. At surgery endometrioma-like cyst fluid was drained and cystectomy was performed. Pathological examination from cyst wall reported as endometriosis. In conclusion vaginal endometriotic cyst, a rare type of endometriosis, must be kept in mind when vaginal cyst pain and size vary with menstrual period.

Keywords: Vaginal cyst, endometriosis

[PP-303]

Edaravone protects ovaries from radiation-induced apoptosis

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Objective: Ovaries are very sensitive and prone to radiation-related damage. Radiation impairs the ovaries by triggering apoptosis of follicular cells and chromosomal damage and oxidative stress. Edaravone is a potent

free radical scavenger, which has been clinically used to treat the neuronal damage following acute ischemic stroke. Our purpose is to evaluate the protective effects of edaravone and to investigate the histopathological and immunohistochemical changes in rat ovaries after radiation.

Material and Methods: Thirty two Wistar albino female rats were randomly divided into four groups. 1: control group, 2: sham group (only radiation), 3: 450 mg/kg edaravone and radiation group, 4: 45 mg/kg edaravone and radiation group. Four days after radiation exposure, the rats were sacrificed and the ovaries were removed. Histologic changes under light microscopy and immunoreactivity for anticaspase-3 were noted and compared between the four groups.

Results: There was a statistically significant difference in follicle counts, vascular congestion, edema, cytoplasmic vacuolization and interstitial cell degeneration between the groups. Radiation causes deterioration of histopathological parameters. Administration of edaravone at different doses seems to reverse these alterations and alleviate the injury. Antioxidant defense mechanisms appear to be enhanced by edaravone.

Conclusion: This is the first study evaluating the protective effects of edaravone on radiation-induced ovarian damage. Edaravone decreased the follicle apoptosis and attenuates ovarian damage induced radiation in rats.

Keywords: Edaravone, rat, ovary

[PP-304]

Postpartum retroperitoneal pelvic hematoma

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Introduction: Postpartum vaginal hematoma is a rare, painful, and benign event, most commonly due to localized hemorrhage. Postpartum hematomas are relatively rare obstetric complications which is associated with laceration of the genital tract during delivery, spontaneous injury of splanchnic vessels or improper haemostasis at the time of episiotomy repair (1). Puerperal hematoma is a rare condition (2). Postpartum hematomas may localized at vulvar, vaginal, paravaginal and retroperitoneal areas. Here we report a case of chronic self limited postpartum retroperitoneal hematoma and its management.

Case Report: A 31 year old gravida 1 patient admitted to our clinic with pelvic pain ten days after vaginal birth. In her medical story, she had an uneventful vaginal delivery ten days ago. Single digit examination identified a right vaginal sidewall hematoma extending 10x12 cm in the cranial-caudal dimension. Her ultrasound examination showed a adnexial mass which was 10x12x10cm at the right retroperitoneal pelvic area (Figure1). After the evaluation, patient underwent to surgery. In intraoperative exploration we found an adnexial mass which origins from paravesical space and extends to right psoas muscle. First we open the retroperitoneum and than we drainage 800 cc hematoma. Abdomen were closed in order after acquiring complete hemostasis. The post-operative period was uneventful and the patient was discharged two days after surgery.

Discussion: Postpartum retroperitoneal hemorrhage is a rare, life-threatening event characterized by bleeding from splanchnic vessels into the retroperitoneal space. The pregnant uterus, vagina, and vulva which have rich vascular supplies and they have risk



Figure 2. (a) Atypical tumoral cells with very scant cytoplasm and round to oval hyperchromatic, pleomorphic nuclei (HEx200) (b): Immunohistochemical Chromogranine A expression of numerous tumoral cells. (c): Immunohistochemical nuclear TTF1 expression of some tumoral cells (d): Ki67 proliferation index is 60% indicating high grade tumor

of trauma during the birth process. It has been reported that radial stretching of the birth canal during parturition can cause contusion or avulsion of the vascular supply and hence hematoma formation. Diagnosis of retroperitoneal hemorrhage is often delayed as a result of its rarity and the lack of specific presenting signs and symptoms. Therefore, a high index of suspicion is necessary to make the correct diagnosis and avoid the associated morbidity and mortality. Symptoms usually develop in the first 24 hours after delivery but we reported a case which was developed after postpartum 10 days. Because of the rarity and varied clinical presentation of such cases the management should be individualised. The treatment of puerperal hematomas is based upon the localization. The three primary approaches for managing puerperal hematomas are conservative management with observation and supportive care, surgical intervention, and selective arterial embolization. There is ongoing debate as to whether vaginal hematoma should be addressed conservatively or by operative management. In conclusion, a worsening vaginal hematoma in the postpartum setting can be the presenting sign of a retroperitoneal hemorrhage. Management of RH is complex and continues to improve with advancements in the investigative strategies, treatment options and critical care specialty. Close monitoring is essential and if there is clinical deterioration, prompt surgical intervention can improve the outcome.

Keywords: Hematoma, pregnancy, retroperitoneal

[PP-306]

Acute arterial occlusion after gynecologic cancer surgery

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Introduction: Acute arterial occlusion is suddenly interrupted the blood flowing to a extremity or organ. Despite rarely, this condition could be cause of organ loss even death. Acute arterial occlusion presentation is prepared for highlight the importance the early diagnose and treatment when potential this condition is.

Case Report: The patient who 62-year-old (gravidity: 3, parity: 1, abortion: 2) admitted with complaints vaginal bleeding and swelling in abdomen. The patient has chronic hypertension, diabetes mellitus and coronary artery disease. Coronary angiography applied 5 times and cared stent. Septate-solid cystic mass (115x75 mm) at left ovary, cystic mass (30x20 mm) at right ovary and extensived fluid at the Douglas detected in the Pelvic magnetic resonance imaging. The tumor markers were in which; CA-125: 10200 U/mL, CA-153: 1520 U/mL, CA-19-9: 1187 U/mL. Probe curettage performed cause of vaginal bleeding and detected endometrial polyp at pathology specimen. Enoxaparin sodium (6000 U, 1x1) applied for tromboembolism profilaxia before operation. Ascites fluid drainage by laparotomy approximately 5 liters. Left ovary-originated lesion approximately 15 cm in diameter which adherent to back wall of uterus and sigmoid colon, and right over-originated irregular lesions 15 cm in diameter observed at laparotomy. There were about 2 cm in diameter tumoral implants at front wall of

uterus, sigmoid colon, omentum, intestine surfeca, back peritoneum of abdominal and right diaphragma. High grade serous ovary tumor detected for both ovary at frozen specimen. Total hysterectomy, total omentectomy, metastasectomy, bilateral pelvic and paraaortic lymph-node dissection were applied. There was paresthesia and severe pain at right leg 2nd day after operation, distal part of right extremity is pale and cold in examination. Blood flowing could not observe at right anterior tibial artery and arteria dorsalis pedis in doppler ultrasonographie. Total occlusion of right external iliac artery and distal part of right anterior tibial artery observed in the 3-Dimensional computed tomography angiography. There was collateral blood flowing at right common femoral artery (Figure 1 and 2). Immediately, embolectomy performed for right femoral artery. The patient was discharged 8th days after noncomplicated operation. Cardiac thrombus was not detected in echography. Carboplatin and paclitaxel treatment was started after 3c-high grade serous ovary carcinoma was detected at pathology specimen.

Conclusion: Acute artery occlusion frequently occurs of thrombus or embolus obliterans. Artery Blood flowing over again supply with urgent application, after artery occlusion have diagnosed immediately by examination and imagination methods. Arterial occlusion is rarely observed after gynecologic cancer treatment. Necrosis is formed at delayed treatment cases and this condition cause of organ loss, extremity amputation even death. So that, lower extremity pulses documentation at post-operation following of pelvic surgery cases, it is helpful for decrease the unfavourable results.

Keywords: Acute arterial occlusion, ovarian cancer surgery

[PP-307]

Heterotopic pregnancy case report

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Introduction: Heterotopic pregnancy is characterized as the presence of two or more gestation sacs, in the uterine cavity and the other usually in the fallopian tube simultaneously. It was first reported in 1708 as an autopsy finding. Spontaneous heterotopic pregnancy is rarely diagnosed with a 1/7.000 to 1/30.000 incidence. However, heterotopic pregnancy incidence increases recent years.

Case 1: A 29-year-old woman, gravid II Para I, was admitted to the emergency department with acute abdominal pain. The abdominal examination revealed generalized tenderness, guarding and rebound at right lower quadrant. A normal-looking IU gestation with a sac of 13,7 mm in diameter and a crown-rump length of 2 mm, with a positive fetal heart rate consistent with a fetal age of approximately 5 weeks. Also, haematosalpinx, heterogeneous formation with rupture sized 79*40 mm at right adnexal and heterogeneous formation with rupture sized 12*9 mm in the adnexal was demonstrated. The laparoscopy was realized, which demonstrated 1500 cc haemorrhagic fluids in abdomen. Haematosalpinx sized 7 to 8 cm and ectopic pregnancy with rupture in right fallopian tube was demonstrated. Intrauterine fetal heartbeat was detected as positive fetus at ultrasonography. It was planned to discharge the patient with no additional complaint.

Case 2: A 21-year-old woman, gravid I, married for 4 months, last menstrual period was dated July 1st, 2015 was admitted to the emergency



Figure 1. Axial CT Angiography examination. Left anterior tibial artery (red arrow) is normal at the distal crural level. Contrast enhancement is absent in the right anterior tibial artery consistent with occlusion

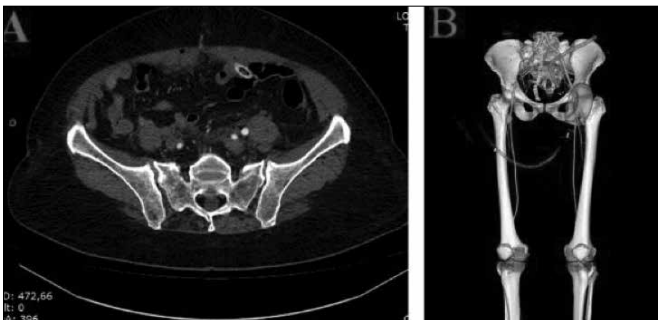


Figure 2. CT angiogram of the pelvis and upper legs (A) and CT angiogram with 3D reconstruction (B) show absence of flow in the right external iliac artery (white arrow) indicating arterial occlusion. Left external iliac artery is patent (white arrow head)

department with acute abdominal pain. The abdominal examination revealed generalized tenderness, guarding and rebound at right lower quadrant. The Vaginal examination revealed vaginal bleeding as spotting in the form of collum multipar. Uterine size was 12 weeks. The ultrasonography was realized, which demonstrated a crown-rump length of 45mm, with a positive fetal heart rate consistent with a fetal age of approximately 11 weeks and 4 days. Ectopic pregnancy sized 4*5 cm was observed at right adnexa. Free intraperitoneal fluids were observed in the pouch of Douglas, at right adnexa and under the liver. The laparoscopy was realized, which demonstrated 2000cc haemorrhagic fluids in abdomen. Salpingectomy was realized for right side. Hemowak drain was inserted to abdomen. 1500cc serohaemorrhagic fluids were demonstrated at post-operative period. Intrauterine fetal heartbeat was detected as positive fetus at ultrasonography. It was planned to discharge the patient with no additional complaint.

Conclusion: Mostly it is suspected from this case after ectopic pregnancy component is ruptured. Heterotopic pregnancies are often diagnosed in the first trimester of pregnancy. TVUSG is the most important diagnostic tool we have in the diagnosis of heterotopic pregnancy despite low sensitivity. As a result, it is important to follow especially for patients with no risk factors that can be put in terms of early diagnosis of this condition in the early stages of β - hCG and TVUSG series in terms of early diagnosis of this case which is rarely encountered and life threatened. We think that it is useful that adnexal areas should be examined carefully for the patients with risk factors, intrauterine pregnancy, even if available.

Keywords: Heterotopic pregnancy



Figure 1

[PP-308]

Extremely rare case: Amelia-Phocomelia in IVF pregnancy

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Introduction: Congenital limb defects are rare fetal anomalies with prevalence of 0.55 per 1,000 birth. Amelia, defined as the complete absence of the skeletal parts of a limb, is generally thought to be a sporadic anomaly. It can present as an isolated defect or with associated malformations, particularly abdominal wall and renal anomalies. Teratogens such as thalidomide, alcohol, vascular compromise by amniotic bands or other causes, and maternal diabetes have been reported to cause this severe limb deficiency. Phocomelia has been interpreted as a patterning defect in the context of the progress zone model, which states that a cell's proximo-distal identity is determined by the length of time spent in such progress zone in the distal limb region. Epidemiologic data on phocomelia are insufficient. Phocomelia also is a rare congenital anomaly in which the proximal part of the limb (humerus or femur, radius or tibia, ulna or fibula) is absent or markedly hypoplastic, with normal or nearly normal hand or foot. True phocomelia is characterized by the total absence of the intermediate segments of the limb, with the hand or foot directly attached to the trunk. Although phocomelia is one of the most characteristic defects known to be produced by thalidomide, the causes of most cases of phocomelia today are still to not be determined. Other etiologies of



Figure 2

phocomelia include amniotic band syndromes and vascular damage because of chorion villus biopsy. Also phocomelia can be part of a variety of known syndromes or phenotypes.

Case Report: A 31 year-old healthy gravida 1 patients was referred to our high risk pregnancy unit with suspected skeletal dysplasia at 17 weeks of gestation. Nonconsanguinity healthy parents achieved pregnancy with IVF. There was no known teratogenic exposure during pregnancy. The ultrasonographic evaluation revealed amelia of both upper limbs and phocomelia of lower limbs, scapula and clavicle were detected. Any other anomalies detected on detailed sonography. Parents were counseled with Department of Pediatric Genetic. Amniocentesis and pregnancy termination were offered. Fetal autopsy and karyotype analyse were normal. X ray graphy was performed after termination (Figure 1, 2).

Discussion: This extremely rare case report presents an infant with amelia of upper limbs phocomelia of lower limb with no striking dysmorphic features noticed. Amelia was traditionally thought to be a sporadic anomaly with little risk of recurrence, or evidence of genetic origins. Our case describes a of amelia and phocomelia diagnosed in an IVF pregnancy of a non-consanguineous couple. Clinical examination was consistent with the prenatal findings. The possibility of the recurrence of amelia has been documented in only a few families. In this case, pregnancy and family history were non-contributory factors regarding genetic or teratogenic causes; maternal infection also appears to be unlikely.

Conclusion: In literature phacomelia or amelia can be diagnosed earliest at 12 week by transvaginal usg. Rate of diagnosis of fetal structural anomalies by usg is 41-65%. Early detection of congenital limb anomalies by ultrasonography prenatally is important to give the necessary counseling.

Keywords: Amelia, phocomelia, ivf pregnancy

[PP-312]

Giant fibroepithelial stromal polyp of the vulva: Case report

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Introduction: Vulvar fibroepithelial stromal polyps are benign mesenchymal tumors that are typically seen in women at reproductive age, often 2-5 mm in size and detected during gynecological exam. Rarely, they can reach large dimensions. When in giant sizes, surgical excision provides patient with comfort and hygiene in daily activities. These polyps are hormone sensitive and usually occur in pregnancy. It is thought that the most important reason is chronic irritation. Histopathological examination of the polyp is important in exclusion of malignancy with this diagnosis. In this case, giant vulvar polyp in 38-year-old woman who had it for ten years is presented.

Case Report: A 38 year-old female presented with groin pain. Polypoid mass was observed originating from left labium majus that has got 6 cm long pedicul, 7x6x5 cm in size, brown color, surface ulcers from place to place in the gynecologic examination (Figure 1). There were no findings other than vaginitis in vaginal examination. Transvaginal ul-

trasound showed normal anatomy of the uterus and ovaries. There was no an additional pathology and no inguinal lenfadenopathy. The patient admitted that I have the mass for ten years, never went to the doktor and no treatment. She had a history of once sectio, irregular menstrual cycles and infertility. There was no property routine laboratory examinations. There was no systemic disorders and no property to self and family history. The mass excised with local anesthesia, the therapeutic curettage made to patient in same session and the material sent to pathological evaluate. In histopathologic sections, under stratified squamous epithelium, surface in a fibrovascular stroma vas-



Figure 1. Macroscopic appearance of polyp

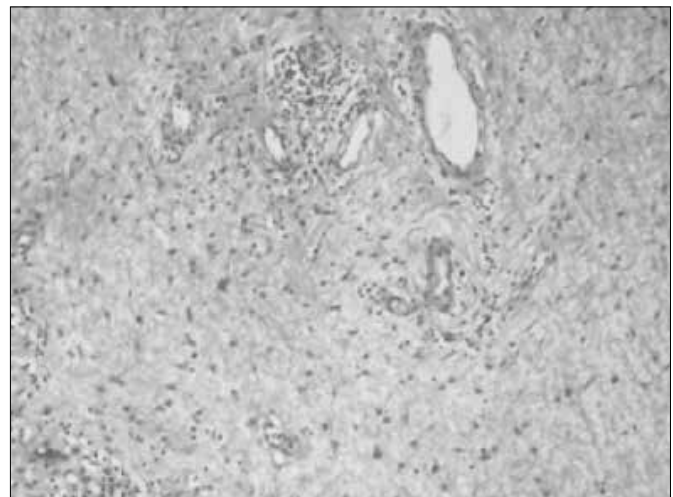


Figure 2. Stellate and multinucleate stromal cells that has a fibrovascular core with small vascular structures

culer lesion consisting of stellate cells and multinuclear stromal cells that the weight of structure was observed (Figure 2).

Immunohistochemical staining be done in these stromal cells and vimentin, desmin, estrogen and progesterone receptor proteins evaluated be positive. This case evaluated that fibroepithelial stromal polyp with the present histomorphologic and immunofenotypic findings.

Conclusion: Vulvar polyps are rare lesions of vulva, they can reach large dimensions. Surgical excision provides comfort, convenience, hygiene to patient in daily activities in addition it is important that histopathological examination should be ruled out of malignancy.

Keywords: Vulva, fibroepithelial polyp, akrokordon, skintag

[PP-314]

Distribution percentage of previous C/S as an indication for the following caesarean section in a multidisciplinary hospital in İstanbul

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Objective: Caesarean sections (C/S) are increasing in numbers throughout the World (1). It is not only the medical indications but also doctors' and patients' preferences occasionally. Caesarean section is an operation carrying the risks and complications of many other major surgeries and has unapproved long-term effects on public health. As in many other countries, the indications for C/S are reestablished by the laws. In this study, we tried to predict the decrement in C/S ratios in future years, according to the yearly distribution of previous C/S which is an absolute indication for today's caesarean sections.

Material and Methods: It is a retrospective study of 3943 C/S patients attended to Bahçelievler Medical park Hospital in between January

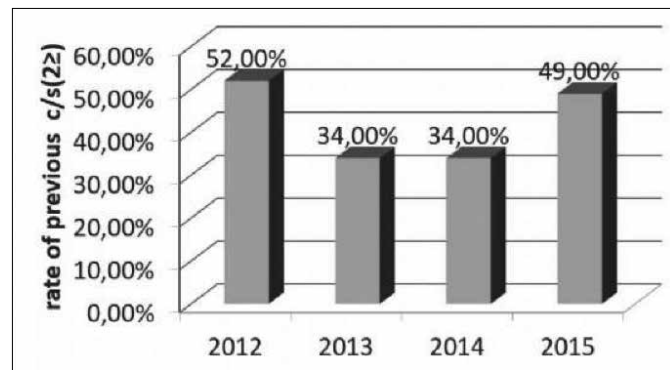


Figure 1. Distribution of C/S with one or more previous C/S between 2012-2015

2015 and January 2015. Inclusion criteria was; one or more previous caesarean sections.

Results: In this retrospective data, we showed that 3943 patients, of 18-43 years, underwent C/S operation during a four-year time span. Of these patients; 1675 women (42.4%) had the C/S indication because they have previous caesarean sections. Distribution of C/S (with one or more previous C/S) in a year / percentage axis is presented in Figure 1.

Conclusion: Although the statistical analysis is not accurate, there is an increasing percentage of C/S (approximately 58%) in Turkey, owing to the wide range of indications (2). We studied with patients of moderate sociocultural status and found no decrement in caesarean section rates in four-year time span, although there had been limitations in indications by law. Further studies with longer duration are needed to estimate the declining tendency of C/S rates in the future by the effects of limitations in indications.

Keywords: Caesarean section, rate

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2016 TAJEV / Video Presentation

[VP-001]

Laparoscopic cerclage in the 12th week of gestation after radical trachelectomy and following IVF therapy

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Objective: Trachelectomy is a surgical procedure for patients with cervical intraepithelial neoplasia and early-stage cervical carcinoma, who wish to conserve fertility. As the surgical procedure may change the shape of the cervix and cause cervical insufficiency, infertility or poor obstetric outcomes are more common. Although most patients conceive spontaneously followed by radical vaginal trachelectomy (RVT), some may require assisted reproductive technologies owing to cervical stenosis. Increased likelihood of preterm labor and delivery is another concern for subsequent pregnancies after RVT. Second trimester miscarriage and preterm labour could be caused by cervical shortening or absence of the defensive cervical mucous plug in 15% to 35% of patients and/or fetal death with pregnancies having undergone the RVT. However, the ideal obstetric standard of care for patients who have undergone RVT has not yet been established. Laparoscopic cerclage is usually performed to help prevent possible cervical incompetence right after radical trachelectomy or in the first trimester of gestation. The procedure may technically be difficult due to the increased size of the uterus and collateral veins around cervicoisthmic area during late first trimester.

Material and Methods: To present the technique of laparoscopy assisted cervical cerclage after radical trachelectomy in late first trimester.

Design: Video demonstration of the steps of the laparoscopic cerclage procedure, location of the cerclage during follow up.

Intervention: A 34-year-old woman was referred to the in vitro fertilisation (IVF) clinic following failure to conceive with male factor infertility. She had a history of two missed abortions, followed by a radical laparoscopic trachelectomy and bilateral laparoscopic pelvic node dissection as fertility sparing surgery for cancer of the cervix stage 1B. She remained under follow up for 4 years and was disease free at the time of IVF therapy. Following a successful ICSI and a single embryo transfer, she was offered a laparoscopic cerclage, which she approved at the end of 12th week of gestation.

The laparoscopic cerclage was performed by 5-mm mersilene tape and a blunt-tipped needle (RS21; Ethicon). The operation time was 45 minutes. There were no operative or immediate postoperative complications. The patient was discharged home on postoperative day 1. The remainder of the pregnancy was uneventful, and she delivered via scheduled cesarean section in 38th week of gestation. The vigorous newborn was 3050 g.

Conclusion: Laparoscopic cervical cerclage during pregnancy can be safe and effective treatment for patients after trachelectomy and eliminates the need for open laparotomy.

Keywords: Cervical cancer, laparoscopic radical trachelectomy, laparoscopic cerclage, IVF, invitro fertilisation

[VP-002]

Laparoscopic management of an ectopic pregnancy in a lower segment cesarean section scar

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Introduction: Pregnancy developing in a previous cesarean scar is the rarest ectopic pregnancy. An early diagnosis is crucial because of the risk of rupture that can result in severe hemorrhage. We report such a case diagnosed at 9 weeks of gestation by endovaginal ultrasound and treated through a laparoscopic approach.

Case Presentation: The patient, a 32-year-old gravida 2, para 1, at 9 weeks of gestation, presented to our institution complaining of slight active vaginal bleeding and lower abdominal pain. Her obstetric history revealed one delivery by low transvers cesarean section (for indication of previous uterine surgery for fibroid removal). The patient presented no sign of shock and gynecological examination revealed a normal sized uterus, a closed cervix with minor bleeding and minimal pelvic pain. Transvaginal ultrasound scan demonstrated a well encapsulated bulging mass and a gestational sac within the cesarean scar containing an 9 weeks embryo based on crown-rump length (CRL) with cardiac activity. A sagittal plane of the uterus through the gestational sac allowed a precise localization of this pregnancy, embedded at the site of previous cesarean scar and protruding toward and under the vesico-uterine space.

A diagnostic laparoscopy showed initially normal finding. However, the dissection of the vesicouterine fold revealed the uterine perforation into the vesico-uterine. Product of conception was removed by laparoscopy assisted curettage, followed by laparoscopic suturing of the defect. Total operative time was 30 minutes, blood loss was limited, and no transfusion was needed. The patient was discharged on the 2nd day following the intervention, and the follow-up was uneventful.

After three months of postoperative contraception, the patient became spontaneously pregnant and ongoing normal pregnancy was in 26th week at the time of the publication.

Discussion: Laparoscopic surgical management of a viable ectopic pregnancy is technically simple, and is followed by good recovery.

Keywords: Laparoscopy, ectopic pregnancy, cesarean section scar

[VP-003]

Large uterus; single port hysterectomy

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Introduction: Most of gynecologic procedures such as hysterectomy, salpingectomy, cystectomy and myomectomy can be done with sin-

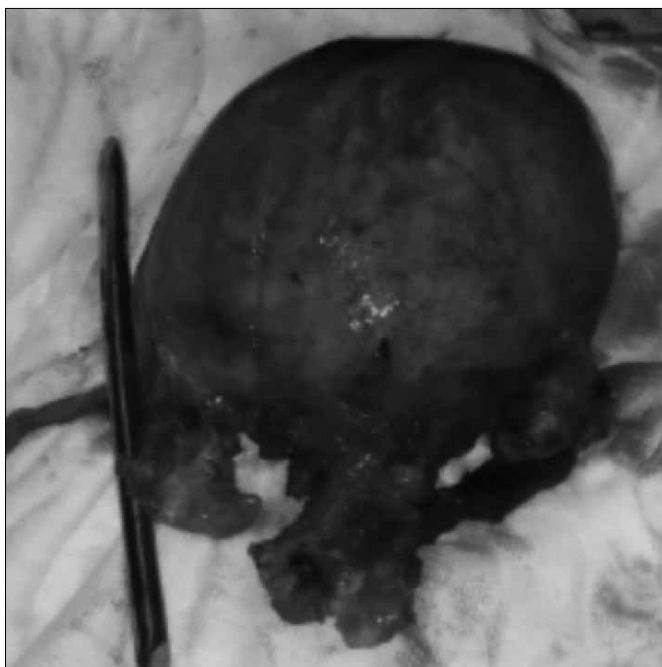


Figure 2. Large uterus

gle port laparoscopic surgery instead of conventional laparoscopy. In recent years, single incision laparoscopic surgery (SILS) has become more popular and invasiveness of laparoscopy has decreased.

Case Presentation: A 47-year-old woman Gravida 2, Parity 2 patient was admitted with menorrhagia. Transvaginal ultrasound revealed a large, adenomyotic uterus with a 7x7 cm adenomyoma on the fundus. Decision of hysterectomy was made. Body mass index of patient was 40.7. Total hysterectomy and bilateral salpingoophorectomy was performed with multichannel access device (OCTO™ Port; DalimSurg-net, Seoul, South Korea). Uterus was removed through vagina and 5 mm accessory trocar was inserted on the left side for intracorporeal suturing and drain placement. Length of operation was 150 minutes. Surgery was carried out uneventfully; however, a consultation with general surgery was made due to feculent drainage on postoperative day 1. Laparotomy was made by general surgeon due to suspicion of intestinal injury and a full thickness defect of 0.5 cm in maximum diameter was found on jejunum. Probably, insertion and removal of instruments caused an injury. Injury was repaired primarily and patient was discharged on postoperative day 8.

Discussion: After selection of suitable patients, transumbilical single port laparoscopic hysterectomy is a safe and feasible operation. Silicon access orifices of Octo-port allows use of flat instruments and reduce instrument sword-fighting. Nevertheless, caution should be taken during insertion and removal of instruments through multichannel access device to prevent bowel injury.

Keywords: Single port, laparoscopic hysterectomy, large uterus

[VP-004]

Laparoscopic management of cesarean scar pregnancy

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Ectopic pregnancy in a previous cesarean scar occurs in about 1 in 2000 pregnancies and accounts for 6 percent of ectopic pregnancies among women with a prior cesarean delivery. The pregnancy is located in the scar and is surrounded by myometrium and connective tissue. The clinical presentation ranges from vaginal bleeding with or without pain to uterine rupture and hypovolemic shock. The diagnosis is made by sonographically visualizing an enlarged hysterotomy scar with an embedded mass, which may bulge beyond the anterior contour of the uterus.

The optimal treatment for a cesarean scar pregnancy is unclear and therapy should be tailored to the patients' clinical presentation. A patient who shows signs of hemorrhage or hemodynamic instability will require surgical intervention. This may include laparoscopy or laparotomy, or possible hysterectomy. In the stable patient, therapy may involve dilation and curettage or methotrexate therapy.

We report the case of 30 year old multiparous women at 6 weeks of gestation who presented with a pregnancy developing in the scar of a previous cesarean section. An early diagnosis was made by transvaginal ultrasound.

In this video, our aim is to present a case of laparoscopic removal of cesarean scar pregnancy.

Keywords: Cesarean scar pregnancy, laparoscopy

[VP-005]

Laparoscopic surgery of a case with deep pelvic endometriosis

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Adequate treatment of severe deep pelvic endometriosis requires complete excision of all implants. The purpose of this video presentation is to describe our experience with planned complete laparoscopic management of deep pelvic endometriosis. Our patient was 46 years old and had two caesarian section before. She also had a laparoscopic surgery for endometrioma 3 years ago. She had clinically chronic pelvic pain, dysmenorrhea and dyspareunia. In preoperative ultrasonography, there were bilateral ovarian cystic masses and CA 125 level was 100. In this case we performed laparoscopic hysterectomy and bilateral salpingoophorectomy, bilateral ureterolysis, excision of deep endometriotic nodule from rectovaginal septum and excision of endometriotic focus from rectum.

Keywords: Endometriosis, laparoscopy

[VP-006]

Coexistence of lipoleiomyoma of the uterus and primary ovarian leiomyoma: two rare entities in same individual

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Background: Uterine lipoleiomyoma is a rare benign tumor that is composed of various mixtures of smooth muscle and mature fat tissue. The incidence of uterine lipoleiomyomas varies from 0.03% to 0.2%. They are typically found in postmenopausal women ranging from 50 to 70 years of age and they are associated with ordinary leiomyomas.

Primary ovarian leiomyomas are extremely rare, accounting for 0.5–1% of all benign ovarian tumors. The majority of such tumors occur in the reproductive period. Most of them are unilateral and no bilateral cases have been described in patients over the age 35. We present two cases of an ovarian leiomyoma coexisting with uterine lipoleiomyoma.

Case 1: A 59-year-old, gravida 4, para 3, postmenopausal woman exhibited pelvic discomfort. She experienced menopause at the age of 53 and a pelvic examination revealed a solid, tender mass on the left side that could not be clearly separated from the uterus. It was difficult to differentiate whether it is originated from the uterus or the ovary. A pelvic ultrasound revealed a normal-sized uterus and a 10×8×8 cm heterogeneous mass without vascularity. Her CA 125, CA 19-9 values were within normal limits. At laparotomy, her bilateral ovaries and tubes were normal in size but there was an 8 cm mass arising from the posterior fundocorporal region of the uterine wall. The patient had previously undergone a total abdominal hysterectomy and bilateral salpingo-oophorectomy. The postoperative period was uneventful.

Case 2: A 37-year-old, gravida 0, para 0, infertile woman exhibited primary infertility. Her gynecological history was normal. A pelvic examination revealed bilateral ovarian cystic masses and nodularity in Douglas. A pelvic ultrasound revealed a normal-sized uterus and bilateral anechoic cystic mass that seems like an endometrioma. CA 125 value was within normal limits. She underwent a laparoscopy with an initial diagnosis of primary infertility and bilateral endometrioma. At laparoscopy, her bilateral tubes were normal in size. Small superficial implants of endometriosis were present in Douglas. There was a 1 cm ovarian leiomyoma with 2 cm endometrioma localized, at the left ovary and 3 cm endometrioma localized at the right ovary, 0.5 cm subserosal fibroids at posterior fundocorporal region of uterine wall. Patient had undergone firstly uterine and ovarian myomectomy and subsequently to endometriotic cyst excision. No complication occurred during the post-operative period and she was discharged from the hospital at 48 hours after operation.

Conclusions: Ovarian leiomyomas should be differentiated from ovarian thecomas, fibromas, and uterine leiomyomas becoming parasites on the ovary. The coexistence of an ovarian leiomyoma with a uterine leiomyoma has been reported by several authors. However, to our knowledge, this is the first case of primary ovarian leiomyoma coexisting with a uterine lipoleiomyoma, two rare entities, in the same individual. This case may help and add information to clarify the pathogenesis of these lesions.

Keywords: Laparoscopy, ovarian leiomyoma, uterine lipoleiomyoma

[VP-007]

Hybrid natural orificial transluminal endoscopic surgery (Hybrid-NOTES) for an ovarian mass

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In this case we presented a forty three years old premenopausal patient, with a eight cm hypoechogenic cyst in the right ovary.

Vaginal access

The patient was laid dorsal litotomy position under general anesthesia. The posterior lip of the cervix was grasped and elevated by tenaculum. A posterior culdotomy was performed five cm under lower part of the cervix by using monopolar cautery. The abdominal cavity was explored by finger from the opened window to exclude any pelvic adhesions. A Single Incision Laparoscopic Surgery trocar was inserted into the pelvic cavity. CO₂ gas was insufflated via this trocar to achieve pneumoperitoneum. A 10-mm rigid zero-degree telescope was then inserted for optic imaging. In exploration of the cavity there was a eight cm ovarian mass originating from the right ovary. A right salphigooophorectomy then performed via articulating tissue sealer.

Umbilical access

A ten millimeter umbilical trocar then inserted to assist visualising the pelvic mass while removing it from the vagina. A 10 mm endobag was inserted vaginally and the mass containing fatty fluid was taken out in the bag after fluid aspiration. The colpotomy defect was sutured with 2-0 vicryl. The time of the operation was around 1 hour and the operation ended with no complication. The patient was discharged postoperative 1st day with no complaints. The final pathology was reported as dermoid cyst of the ovary.

Keywords: Laparoscopy, natural orifice transluminal endoscopic surgery, ovary

[VP-008]

Laparoscopic myomectomy with temporary clipping of uterine and infundibulopelvic vessels

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This video presents a laparoscopic myomectomy in a 37 year-old patient with chronic pelvic pain and excessive menstrual blood loss.

Myomectomy starts after intraoperative temporary clipping of the uterine artery and infundibulopelvic vessels. This simple method allows for the prevention of massive bleeding during the excision of the myomas.

The technique consist in opening the parietal peritoneum of the pelvic side wall in order to detect uterine artery between the ureter and the umbilical artery and to clip it temporarily.

We cut the peritoneum at the junction between the ureter and umbilical artery. and dissect surrounding tissue of the ureter, umbilical and uterine artery with small and gentle movements. We placed the clip on uterine artery just before origin of uterine and umbilical artery as shown in the case. We performed the same procedures for the left side.

Moyomectomy was performed by sharp and blunt dissections. The uterine defect was closed by two layer suturing.

We remove of the clips the left then right side after the procedure.

Keywords: Laparoscopy, uterine artery, uterine myomectomy

[VP-009]

Laparoscopic detortion of the ovary and bilateral ligamentopexis

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This video shows a case of 15 years old girl presenting with acute abdominal pain and tenderness. The ultrasound imaging revealed that a ten cm solid adnexal mass with no blood flow in the right pelvic side. Laparoscopy was planned due to acute abdominal pain. In the exploration of the abdominal cavity there was tortioned 10 cm ovary with its pedicle on the right side. We decided to perform detortion and waiting for the colour change of the ovary. The ovary was tortioned for fifteen times around its pedicle. The ligamentum ovarii proprium was also ruptured from the middle part. An incision was performed from the anti mesenteric part of the ovary to obtain a biopsy and to explore the presence of any ovarian cysts. A small biopsy was taken and the right ligamentum ovarii proprium was approximated by suturing. A ligamentopexis was performed for the left side to prevent any future ovarian tortion.

Keywords: Laparoscopy, ligaments, ovary

[VP-010]

Laparoscopically managed cesarean scar pregnancy; a case report

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Introduction: Cesarean scar pregnancy (CSP) is an ectopic pregnancy which is defined a gestational sac located in prior cesarean low segment uterine incision site within diminished myometrium tissue. Diagnosis of CSP is usually made with ultrasonography and/or MRI identifying empty uterus and cervical canal, a gestational sac under bladder wall with thin or diminished myometrium. Due to increasing numbers of cesarean deliveries, frequency of SCP cases are on the rise. It is estimated that 1 in 531 women with a prior cesarean will have CSP in later pregnancies. And 4.2% of ectopic pregnancies are CSP. Increased risk of complications like uterin rupture, life-threatening hemorrhage and hypovolemic shock make CSP treatments im-

portant. Although recently more studies have being published, the most safe and efficient clinical approach to CSP is yet to be determined. There is no consensus on treatment of CSP. There are various treatment options defined for CSP. Systemic/local methotrexate infusion with or without needle aspiration, uterin curettage, hysteroscopy, resection of CSP through transvaginal approach, uterine artery embolization, high-intensity focused ultrasound, double balloon placement into the uterus and laparoscopy. Here, we report a case of laparoscopically managed a CSP case.

Case Presentation: A 32 year old gravida 4, para 1 woman was admitted to our clinic complaining delay of menstruation. She had history of one previous cesarean section 5 years ago and 2 missed abortion treated with dilatation curettage 2 and 1 year ago, respectively. In ultrasonographic examination, it was revealed a gestational sac with fetal pole in the isthmic zone and diminished myometrial tissue blew the bladder in the cesarean section incision site with a normal posterior uterine wall thickness. Crown to rump length of fetal pole was 16mm and fetal cardiac activity was positive. The patient underwent laparoscopy. Bladder is dissected from isthmic area, than cesarean section scar resected within gestational sac. Than defect was repaired with barbed suture. There was no complication and estimated blood loss was 150cc. Patient was discharged the day after surgery.

Discussion: CSP is a rare but life threatening condition. Prevalence of CSP is rising due to increasing cesarean section deliveries worldwide. There is no consensus for treatment of CSP. Although laparoscopic management of CSP seems safe and efficient, there is need of further well designed studies to assess how to treat.

Keywords: Cesarean scar pregnancy, ectopic pregnancy, laparoscopy

[VP-011]

A novel vaginal repair technique of apical prolapse and enterocele ensuring ureteral safety via vaginal ureteral dissection eliminating the need for intraoperative cystoscopy

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Objective: To present a novel technique for repair of apical prolapsus and enterocele which ensures ureteral safety eliminating the need for intraoperative cystoscopy.

Methods: All 5 patients underwent vaginal hysterectomy (VH) and ligasure assisted vaginal bilateral salpingoophorectomy (BSO) + modified high uterosacral ligament suspension (USLS) with vaginal ureter dissection. In the technique; following BSO; medial peritoneal leaflet under the infundibulopelvic ligament (IPL) is incised and ureters are dissected free vaginally of the surrounding connective tissue bilaterally up to the level of crossing point with the uterine arteries. Both ureters are visualized sufficiently and mobilized to more anterior and lateral position. Thereupon secure and strong suture bites were taken bilaterally from the uterosacral ligaments.

Technical Description: After completion of BSO, peritoneum under the infundibulopelvic ligament was incised and peritoneal leaves were separated. Medial peritoneal leaflet was reflected medially and dissected bluntly from the lateral attachments until the ureter is visualized. Peritoneal incision was carried downwards. The ureteric course was followed with blunt dissection upto the level of crossing point with the uterine artery. At this step, ischial spine was palpated, by blunt dissection posteriorly-medially and with medial retraction of rectum, USLs were dissected and visualized retroperitoneally. Both ureters were freed from the surrounding connective tissue by sharp and blunt dissection, displaced to more anterior (upward) and lateral position. Then one pair of proximal high uterosacral fixation sutures (number 1 polyglactin) approximately 0.5 cm proximal to the ischial spine bilaterally and two external McCall culdoplasty sutures, incorporating the peritoneum over the rectum, 0.5 cm caudally from the first suture and 0.5 cm apart from each other were placed. During suturing the proximal USL was directly visualized, mobilized ureters were retracted from the field and, large, durable and secure suture bites were passed from the ligament. All these sutures were pulled to the contralateral side strongly to control the strength and durability of the ligament and if any ureteral kinking would occur with this medial displacement of adjacent tissue. No ureteral kinking was observed with these maneuvers. The pair of high USL fixation sutures were passed through the full-thickness ipsilateral posterolateral vaginal wall corresponding to the place where original USL inserts. Two external McCall sutures were placed through the midline of the reconstructed posterior vaginal wall 1 cm apart. Midline McCall sutures were tied down, elevating the vault into the hollow of the sacrum and obliterating the cul-de-sac, and high USL fixation sutures were tied down bilaterally.

Results: Duration of the operations and bilateral ureteral dissections were 2.5, 2.5, 3, 2, 3 hours and 10, 35, 17, 13, 16 minutes, respectively. All patients had normal preoperative and postoperative renal pelvicalyceal system ultrasonographic examination. Early postoperative follow-up of the patients was uneventful except urinary retention in the first two cases. With a median time of 3 months (2-5 months, range), postoperative follow-up of the patients was uneventful. No urinary, gastrointestinal or neurologic complications have occurred.

Conclusion: The new vaginal repair technique of apical prolapse potentially eliminates all kinds of uterine injuries and the need for intraoperative cystoscopy decreasing the additional costs, operative duration and morbidity related with ureteral complications, cystoscopy and anesthesia.

Keywords: Vaginal ureteral dissection, modified vaginal repair technique of apical prolapse and enterocele

[VP-012]

Hysteroscopically-assisted laparoscopic excision and repair of cesarean scar defect

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The rate of cesarean section has increased rapidly over the last several decades. Although the incidence of the disease varies considerably, cesarean scar defects are being more commonly reported. It is

associated with post menstrual uterine bleeding, secondary infertility and pelvic pain.

A 38-year-old woman, gravida 5, para 5 presented with post menstrual bleeding. Transvaginal ultrasonography revealed niches in the uterine scar. Considering the close proximity to the bladder and uterine scar defect with residual myometrium thickness of 1.8 mm, hysteroscopically assisted laparoscopic excision and repair of the cesarean scar defect was performed.

Although recently there has been growing interest in hysteroscopic resection of the isthmocele, treatment options must be individualized and carefully planned to minimize both complications and the requirement for additional treatments.

Keywords: Isthmocele, laparoscopic repair, abnormal uterine bleeding, hysteroscopy

[VP-013]

Third trimester bilateral ovarian torsion in the presence of bilateral ovarian cysts: a case report

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Introduction: Ovarian torsion is one of the most frequent gynecologic emergencies. Presence of an ovarian mass, especially greater than 5 cm is the most important risk factor. Pregnancy, ovulation induction and prior ovarian torsion are other factors associated with increased risk. Here, we present conservative management with detorsion, cystectomy and oophoropexy in a third trimester pregnancy with bilateral ovarian cysts and bilateral ovarian torsion.

Case Presentation: A 27-year-old primigravida woman at her 34/7 weeks of gestation obtained after a gonadotropin intrauterine insemination cycle was admitted because of left sided abdominal pain and nausea present for the last two weeks. She had an ovarian hyperstimulation syndrome history at the beginning of pregnancy and had bilateral ovarian cysts that persisted during pregnancy. One week before her admission to our clinic her left ovarian cyst had been aspirated at another clinic. Upon admission, both ovaries contained multiple cysts the biggest of which was 8×9 cm at the left side and 6×7 cm at the right side. Radiological ultrasound reported that Doppler investigation of left ovary was suspicious for torsion. Her vital signs were normal. Her hemoglobine was 10.3 g/dL, leucocyte count was 14.400/mm³. Taking her two weeks of pain history into account, we thought it may not be torsion and initiated follow up with analgesics and IV hydration. Her symptoms regressed, she was discharged at 5th day of hospitalization, but admitted same afternoon with acute onset left lower abdominal pain, nausea and vomiting. Radiology reported that blood flow at right ovary was suspicious for torsion while left one was normal this time. Her symptoms were relapsing and remitting, therefore we continued follow up. Two days later her symptoms became more severe, her nausea and vomiting increased, pain increased in intensity, was radiating to her leg and was unresponsive to analgesics. Therefore, cesarean section was performed at 35/7 weeks of gestation. Exploration of adnexial structures revealed torsion of right ovary which had a purple to black appearance, was cystic and had a size

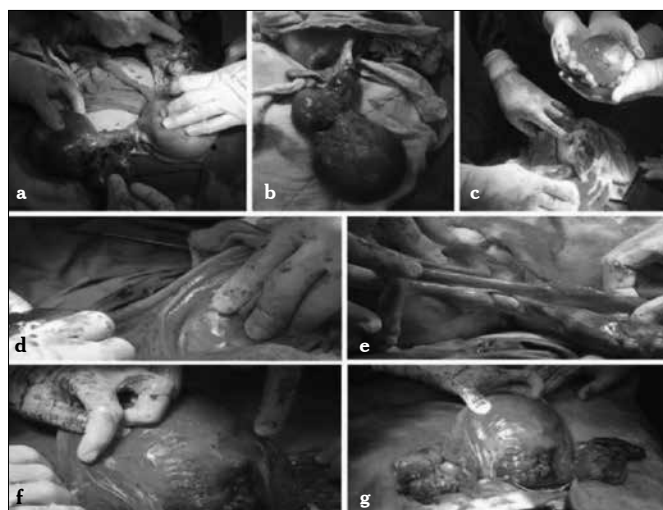


Figure 1. a-g. (a, b) Right ovarian cyst about 15×10cm in size with a purple to black appearance and left ovarian cyst about 10×12 cm in size with patchy echymotic, necrotic areas (c), right ovarian cystectomy material (d, e), right oophoropexy suture front and rear views (f, g), bilateral oophoropexy by fixing the uteroovarian ligament, mesosalpinx and round ligament to each other

of about 15×10 cm (Figure 1a, b). Left ovary was in normal position, contained several cysts, was about 10×12 cm but there were patchy echymotic, necrotic areas on it probably associated with previous torsion and detorsion (Figure 1a). Immediate right ovarian detorsion was performed before closing uterine incision. Within 5 minutes, color of the ovary got better. Bilateral ovarian cystectomy was performed (10×8 cm from right ovary (Figure 1c) (was reported to be a serous cystadenoma), 6×6 cm left ovary) and ovarian defects were sutured. Then, to prevent recurrent torsion, bilateral oophoropexy was performed by fixing the uteroovarian ligament, mesosalpinx and round ligament to each other (Figure 1d-g). The postoperative course of the patient was uneventful and she was discharged 3 days after surgery. She also had a normal course one month after surgery.

Discussion: Ovarian torsion should be considered among differential diagnoses in pregnant women with acute onset abdominal pain. Pregnancy and presence of ovarian masses increases risk of ovarian torsion. Ovarian conservation may be possible even in necrotic appearing ovaries. Oophoropexy may be considered after detorsion to prevent recurrent torsion.

Keywords: Ovarian torsion, bilateral ovarian torsion, oophoropexy

[VP-014]

Robotic resection of vascular mesometrium in an early-stage cervical cancer patient

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Objective: A radical hysterectomy is the recommended treatment option in patients with early-stage cervical cancer (CC). Although various classifications were developed in order to define the resection margins of this operation, no clear standardization could be achieved both in the nomenclature and the extent of the surgery. Total mesometrial resection (TMMR) is a recently described procedure which aims to remove the compartment formed by Müllerian duct in which female reproductive organs develop. TMMR differs from the other radical hysterectomy techniques in that its surgical philosophy, terminology and partly resection borders are different. In this video presentation we aimed to show the surgical steps of the vascular mesometrial resection part of the TMMR operation that we performed using da Vinci® robotic system in a stage IA2 CC patient.

Material and Methods: *Patient characteristics;* A 34-year-old, gravidity and parity one, woman admitted to our clinic with a co-testing result of HSIL with HPV type 16 positivity. She was 48kg in weight with a body mass index of 21 kg/m². Colposcopically directed biopsy was consistent with CIN3. She underwent cold knife conization. Histopathological examination revealed a squamous cell carcinoma with a stromal invasion 4 mm in depth and 6 mm in horizontal spread.

Surgical technique: Patient-side cart of the robotic system was approached to the patient from the right side and docked. The monopolar scissors was inserted through the right robotic trocar; a Maryland bipolar forceps, through the left trocar; and a ProGrasp™ forceps, through the fourth trocar. The operation was carried out in three stages: First, bilateral ovarian transposition was applied; pelvic lymphadenectomy was performed in the second stage; and Müllerian compartment resection was performed in the third stage. The resection of the Müllerian compartment was completed in two steps being the resection of the vascular mesometrium and ligamentous mesometrium. In the resection of vascular mesometrium, first the lateral connections (lateral parametrium) including uterine artery, su-

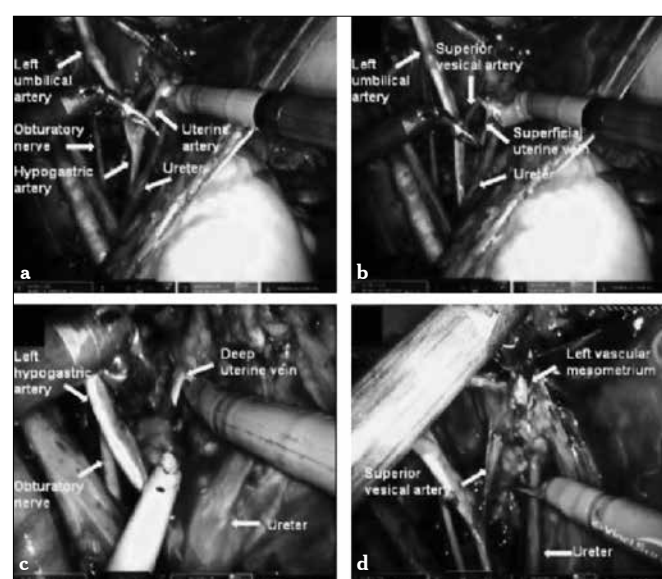


Figure 1. a-d. Resection of the lateral part of the vascular mesometrium (left side) (a), resection of the uterine artery (b), resection of the superficial uterine vein (c), resection of the deep uterine vein (d), the view of the resected mesometrial bundle

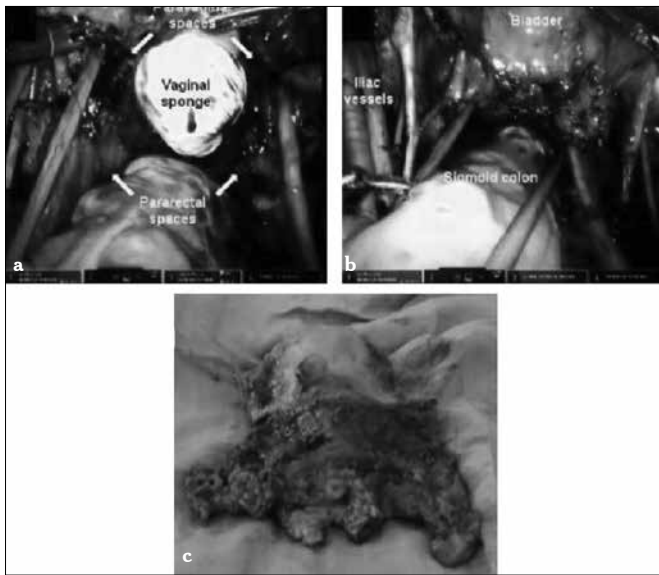


Figure 2. a-c. (a, b) Final view of the pelvis after total mesometrial resection (c), surgical specimen

perforial uterine vein, parametrial LNs and the deep uterine vein were cauterized and cut at their origin from the hypogastric vessels, in the vertical plane, respectively. The lateral mesometrial bundle that was resected was elevated towards the ureter using ProGrasp™ forceps (Figure 1). Subsequently, the anterior connections (ventral parametrium) of the vascular mesometrium were incised in such a way to ensure the lateral borders were superior vesical artery and the ureterovesical junction. Thus, the ureteric tunnel was opened, the ureter was separated from the Müllerian compartment, and the resection of the vascular mesometrium was completed. Final view of the pelvis after total mesometrial resection was shown in (Figure 2).

Results: In total, 200 mL of bleeding occurred. On the second day, a regular diet was started and the urinary catheter was removed. The amount of residual urine volume that was measured by re-catheterization on the third day was 50 mL. She had an uneventful postoperative course and was discharged home on postoperative day five.

Conclusion: Robotic TMMR is a minimally invasive treatment option for the patients with early-stage CC that can be easily adopted into clinical practice.

Keywords: Robotik surgery, cervical cancer, mesometrial resection

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