

*2016 TAJEV / Poster Presentation*

[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  $102.4 \pm 85.9$ ; that of the hyperplasia group was  $143.6 \pm 122.4$ ; and that of the cancer group was  $276.8 \pm 61.8$ . 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 malign 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 foci. 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

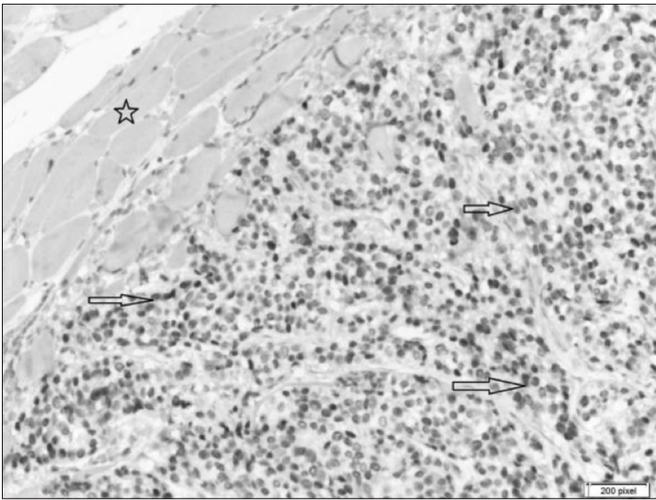


Figure 2. Nuclear p63 positivity with squamous cell cancer in immunohistochemical examination of specimen

**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 4<sup>th</sup> 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  $28.14 \pm 8.61$  (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  $2.7 \pm 0.56$  (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  $1.85 \pm 0.62$  (1-3 cm) and  $8.71 \pm 1.11$  (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 Mc Indoe technique, neovagen

[PP-016]

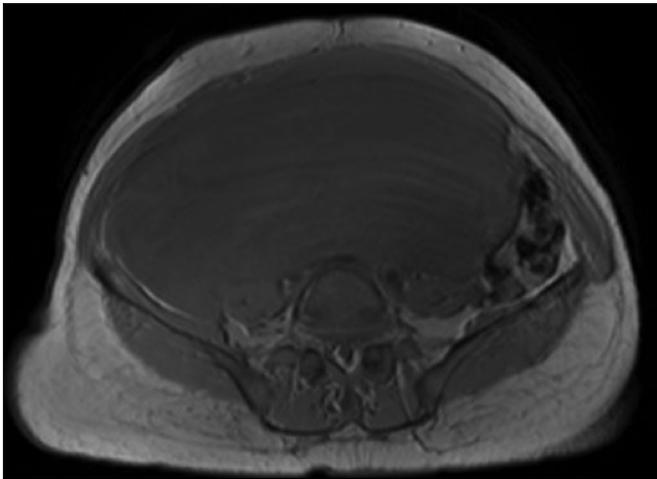
## Retroperitoneal extragastrointestinal giant stromal tumor: A case report

Recep Erin

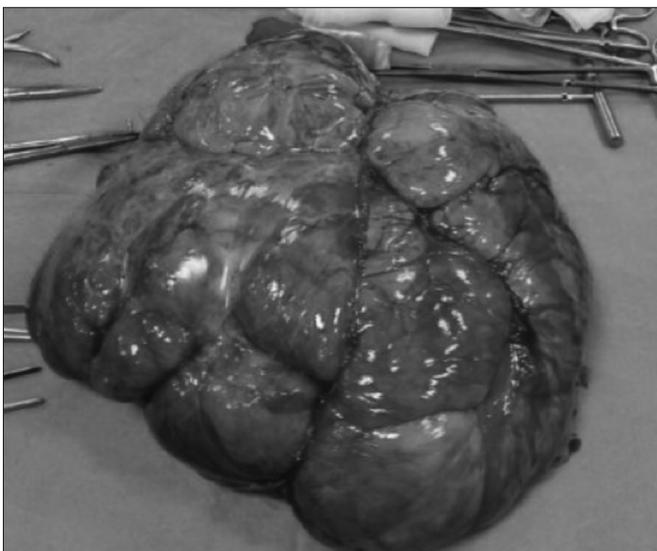
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Gastrointestinal stromal tumors (GIST) are the most frequently seen tumors of mesenchymal origin of the gastrointestinal tract. They are defined in localizations such as the mesentery, omentum and retroperitoneum besides the gastrointestinal tract and these are named extra-gastrointestinal 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

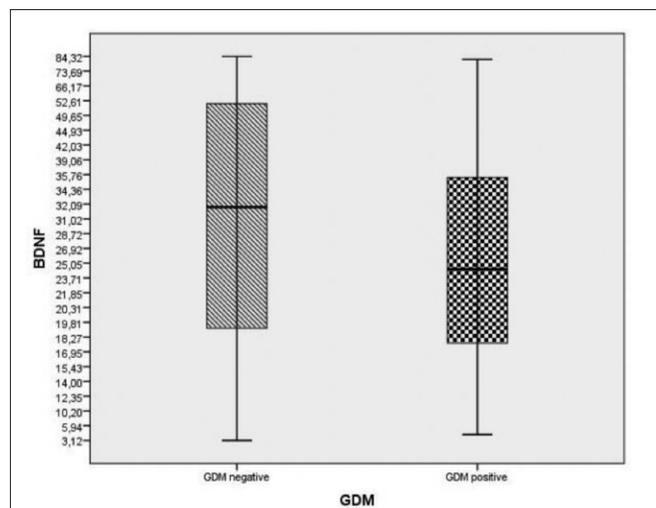


Figure 2. Fetal cord BDNF levels of GDM positive and negative patients

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 <sup>2</sup> )	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
<b>Parity (n (%))</b>			
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*
<b>MoD (n (%))</b>			
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*
<b>Baby gender (n (%))</b>			
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

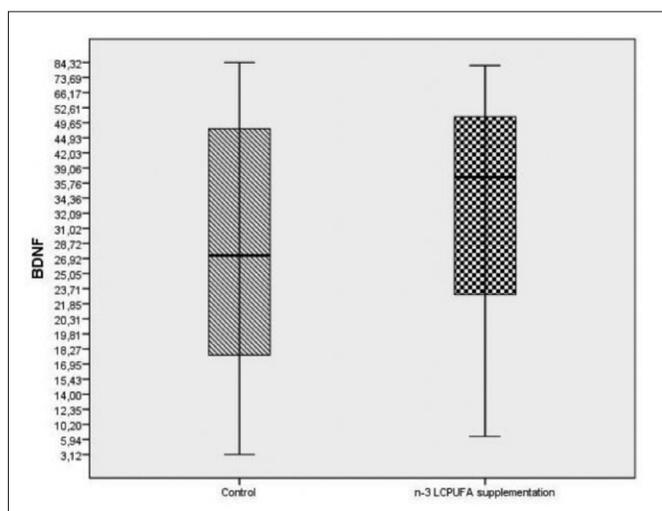


Figure 1. Fetal cord BDNF levels of n-3 LCPUFAs used and patients who did not use n-3 LCPUFAs

**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 supplementation 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 ( $39.45 \pm 21.59$  vs  $35.29 \pm 24.24$ ,  $p=0.28$ ). Fetal cord BDNF levels of patients with GDM were significantly lower than the BDNF levels of patients without GDM ( $28.95 \pm 18.81$  vs  $38.56 \pm 24.09$ ,  $p=0.03$ ).

**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 multiple 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 ±SD and non-normal data as median (Q1–Q3)**

	Normal Outcome (n=362)	Miscarriage (n=53)	P
Maternal age in years, mean±SD	27.19±5.32	29.21±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±10.71	24.23±8.87	<0.001
YSD mm	4.25±0.75	4.49±1.40	0.213
GA by CRL day	50 (45–57)	44 (43–50)	<0.001
GA by GSD day	57.73±10.24	49.32±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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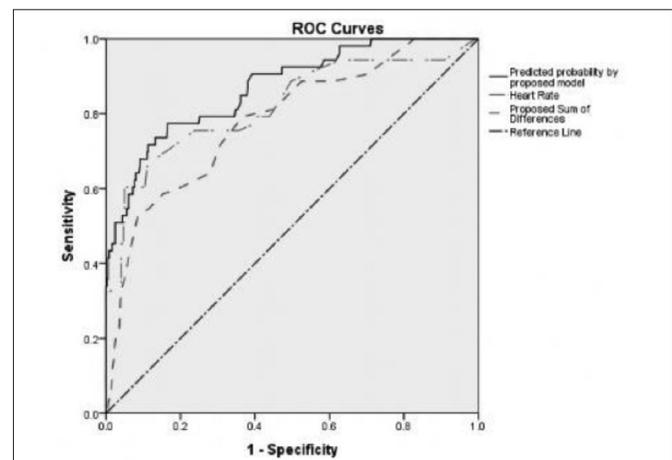
**Objective:** To generate a prediction model for miscarriage in women with a viable single pregnancy from first-trimester ultrasound findings and maternal characteristics.

**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.

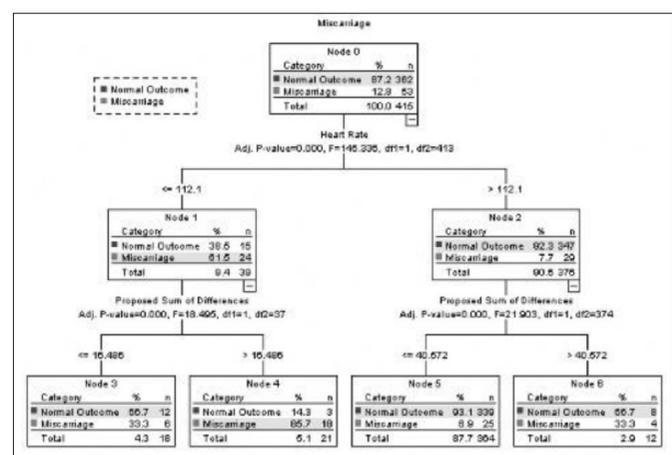
**Results:** Fifty-three (12.8%) patients had miscarriages and 362 (87.2%) had normal outcomes. Forty-three (81.2%) miscarriages occurred in the first trimester, 5 (9.4%) in the second trimester, and 5 (9.4%) represented fetal anomalies. EHR, CRL, and MGSD were decreased in the miscarriage group (p<0.001); 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 1. ROC curves for the proposed model, heart rate, and proposed sum of differences**



**Figure 2. Decision tree for the prediction of risk of subsequent spontaneous miscarriage in live embryos in the first trimester**

## [PP-022]

## The effect of smoking in pregnancy on fetal umbilical cord brain derived neurotrophic factor (BDNF) levels

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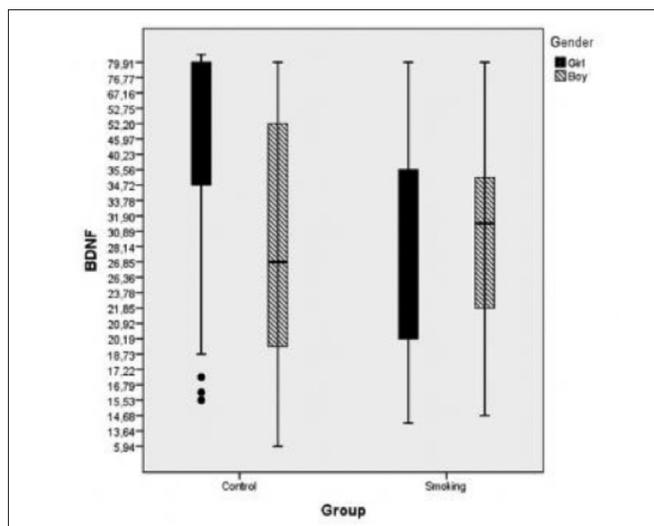
**Objective:** To investigate the effect of smoking on fetal umbilical cord Brain Derived Neurotrophic Factor (BDNF) in smoker pregnant.

**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 ( $32.1 \pm 16.5$  ng/mL and  $50.7 \pm 28.3$  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±5.5	25.9±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 <sup>2</sup> )	27.6±3.8	24.4±4.1	0.003
TSH	2.8±3.1	1.7±0.9	0.08
Gestational age (w)	38.8±0.9	38.7±1.0	0.59
Birth weight (g)	3197±434	3204±331	0.94
Head circumference (cm)	34.2±1.1	34.6±1.1	0.14
Length (cm)	49.6±1.6	49.3±1.6	0.48
Weight gain	10.7±4.7	11.1±4.0	0.66
BDNF (pg/mL)	32.1±16.5	50.7±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  $31.66 \pm 18.41$  ng/mL and in boy infants is  $32.47 \pm 15.80$  ng/mL. However, the mean BDNF level in girl neonates of control group is  $60.63 \pm 25.93$  ng/mL and in boy infants is  $37.30 \pm 26.55$  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-

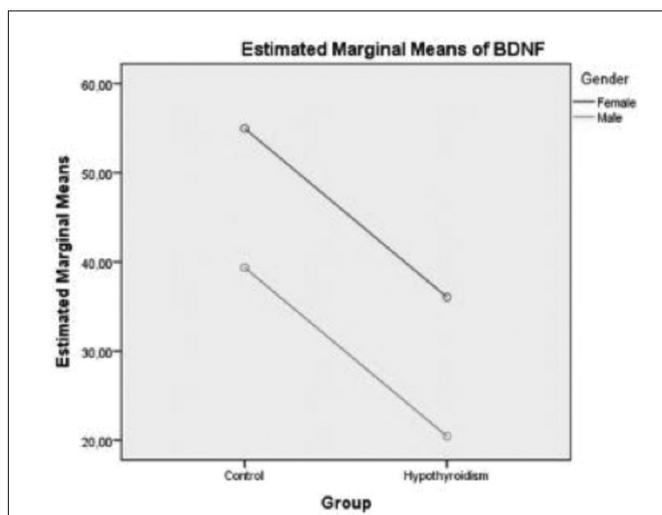


Figure 1. Brain-Derived Neurotrophic Factor (BDNF) levels in the maternal hypothyroidism and control groups according to infant gender

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 37<sup>th</sup> 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
<b>Parity n, (%)</b>			
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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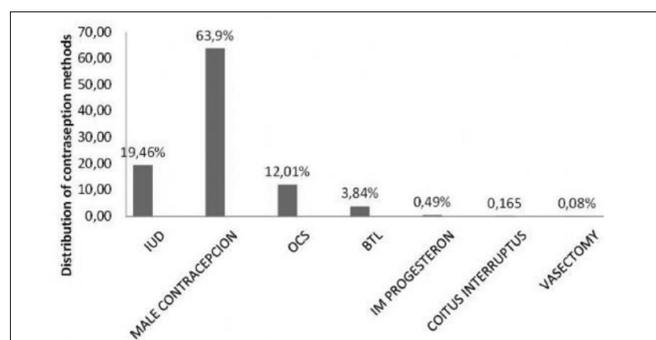
**Objective:** Although there are variable choices of contraception, unplanned pregnancies are still a matter of family planning (1). Improvement in pharmaceuticals and pre-clinical trials aim to scale up the contraceptive methods to a more applicable form for daily practice. Contraception preferences 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 19.4% 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**

Istanbul 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 1.** Transvaginal gray scale sonogram, well-defined slightly echogenic solid mass in the right ovary



**Figure 2.** Transvaginal gray scale sonogram, well-defined hyperechogenic solid mass in the left 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 9<sup>th</sup> gestational week and insertion of bilateral double J stents due to progression to grade 2 hydronephrosis at 20<sup>th</sup> 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/mm<sup>3</sup>. 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 1<sup>st</sup> and 5<sup>th</sup> 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  $\beta$ -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)

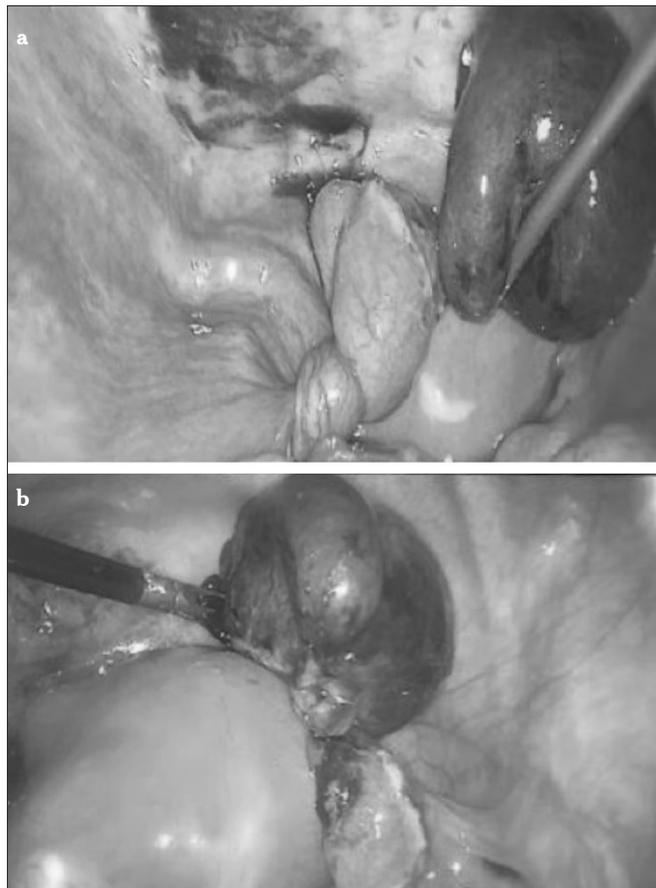


Figure 2. a, b. Isolated torsion of left fallopian tube with a necrotic appearance

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
<b>Application reason</b>			
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)	
<b>Previous fetal loss</b>			
One or more than one	44 (44.9)	54 (55.1)	0.302
No History of foetal loss	99 (51.3)	94 (48.7)	
<b>Living area</b>			
Country side	43 (60.6)	28 (39.4)	0.027
City center	100 (45.5)	120 (54.5)	
<b>Parity</b>			
Nulliparous	38 (50.7)	37 (49.3)	0.759
Multiparous	105 (48.6)	111 (51.4)	
<b>Maternal age (years)</b>			
>35	75 (50.7)	73 (49.3)	0.594
35<	68 (47.6)	75 (52.4)	
<b>Trainingal level</b>			
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 supravalvular aortic stenosis

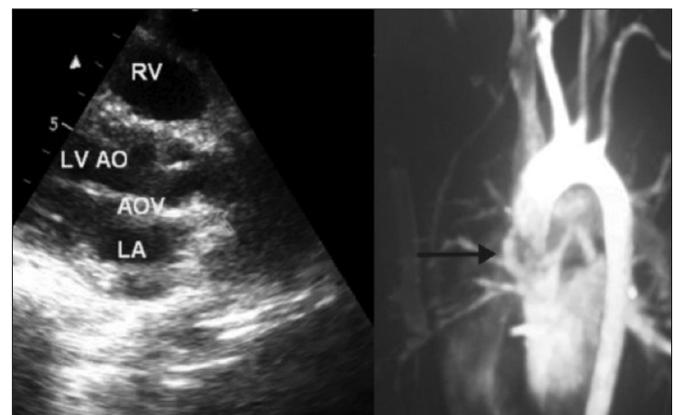
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**Introduction:** Isolated Congenital Supravalvular Aortic Stenosis (CSVAS) is a form of left ventricle outflow obstruction, which mainly located in sinotubular junction. In this case we aimed to present a successfully delivery concluded by healthy 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 28<sup>th</sup> 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  $\chi^2$  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 1cm<sup>3</sup> 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
<b>Type of infertility</b>			
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
<b>Current smoker</b>			
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
<b>Spermiogram</b>			
Normospermi	57 (85.1)	18 (78.3)	0.460
Oligospermi	10 (14.9)	5 (21.7)	
<b>HSG</b>			
Unilateral occ.	1 (4,3)	2 (3)	0.237
Bilateral occ.	22 (95,6)	65 (97)	
<b>PPS</b>			
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
<b>Comorbidities</b>			
Hipothyroidi	2 (8,7)	2 (3)	0.734
Hiperprolactine	1 (4,3)	3 (4,5)	
Trombophilia	1 (4,3)	2 (3)	
<b>Infertility etiology</b>			
PCOS	9 (39,1)	36 (53,7)	0.227
Unexplained	14 (60,9)	31 (46,3)	
<b>Employment</b>			
Yes	4 (17,4)	6 (9)	0.270
No	19 (82,6)	61 (91)	
<b>Trainingal level</b>			
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)	
<b>Marriage type</b>			
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

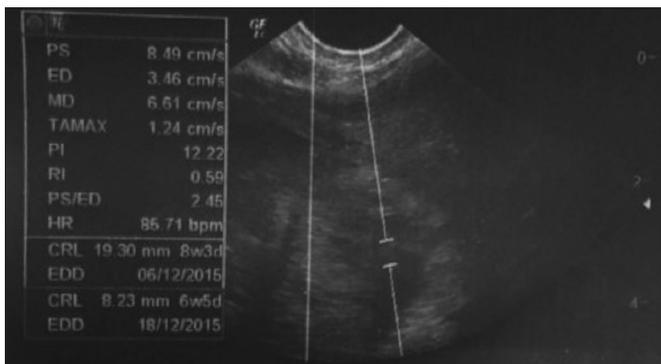


Figure 2. Ultrasound

[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)  $\geq 30$  kg/m<sup>2</sup>] men and 169 non-obese (BMI  $< 30$  kg/m<sup>2</sup>) 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 $\geq 30$ kg/m <sup>2</sup> (n=88)	Non-obese group BMI $< 30$ kg/m <sup>2</sup> (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
<b>Infertility type, n (%)</b>			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
<b>IUI cycles, n (%)</b>			0.320
1	7 (8)	17 (10.1)	
2	4 (4.5)	12 (7.1)	
3	3 (3.4)	4 (4.3)	
<b>IVF, n (%)</b>			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
<b>Previous Urologic Surgery</b>			0.268
Orchipexy	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 hemato-colpometra**

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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 hematocolpometra. 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 hematocolpos and the hematometra 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, hematocolpometra, 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 1<sup>st</sup> and 5<sup>th</sup> 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



**Figure 1.** Omental splenosis tissue which was considered as a hemangioma

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

of 5 units of packed erithrocytes 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, rudimeter 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 2<sup>nd</sup> or 3<sup>rd</sup> 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 corelation 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 (PFDI-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 PFDI-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

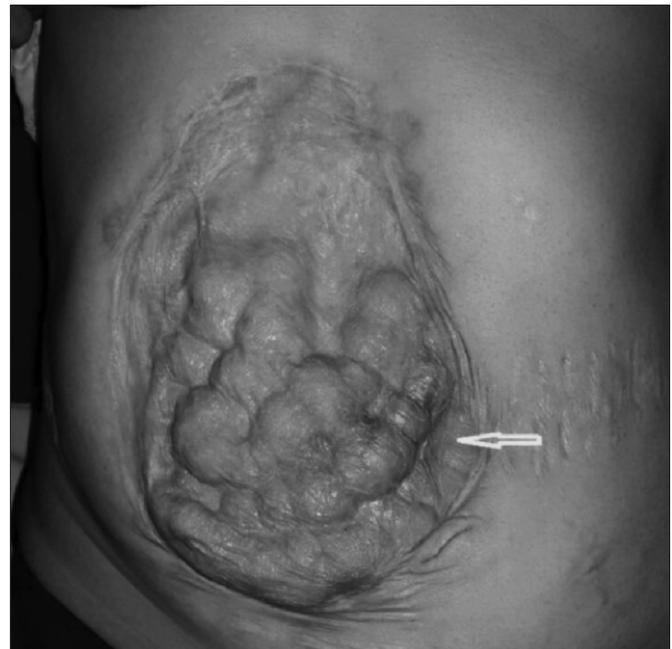


Figure 2. Healed necrotic area after 18 months from the cesarean section

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 pregnancies 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

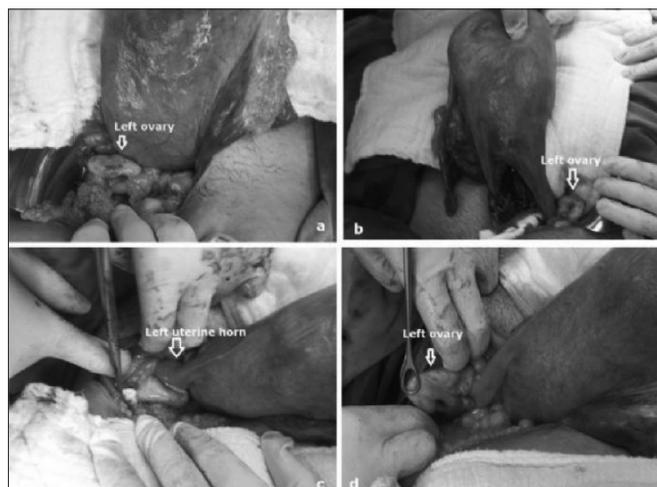
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**Objective:** Inguinal hernia is relatively uncommon in females; it affects males 10 times more frequently. Lifetime prevalence is 20% in males and 2% in females. Its incidence in pregnancy has been reported as 1/1000. Inguinal hernias may be direct 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 1<sup>st</sup> and 5<sup>th</sup> 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 adnexial 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, endotelial 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 complains 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 policlinic 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 policlinic 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 cervicit, 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 standart 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. Cyclic 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. Cyclic 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  $27.66\pm 2.04$ ; having average BMI of  $24.1\pm 3.33$ . 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.  $2.53\pm 1.28$  of ovulation took place on the contralateral intact over whereas  $1.58\pm 0.68$  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 ovary was significantly ( $p<0.05$ ) lower than the ovulation rate of the contralateral unoperated ovary. Ovulation rate of the endometrioma operated ovary with cyst size of  $3\leq x<5$  cm was significantly ( $p<0.05$ ) lower than the ovulation rate of the contralateral unoperated ovary. Ovulation rate of the endometrioma operated ovary with cyst size of  $5\text{ cm}\leq x$  was significantly ( $p<0.05$ ) lower than the ovulation rate of the contralateral unoperated ovary.

**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 follicules 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  $6 \times 7$  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.  $\beta$ -hCG on the second day of hospitalization was 212 mIU/mL. During follow up, abdominal distension increased. At 5<sup>th</sup> day of hospitalization ultrasound showed 9cm depth of fluid at perisplenic and perihepatic areas, bilateral ovaries were about  $10 \times 10$ 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.  $\beta$ -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  $3 \times 2$  cm palpable, painful, solid subcutaneous mass at the right upper side of cesarean scar. Ultrasound examination revealed



Figure 1.

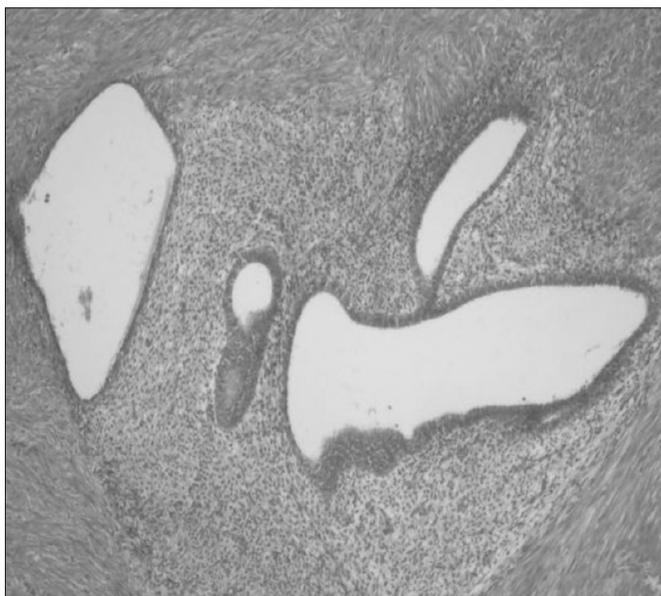


Figure 2.

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 insicion 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-

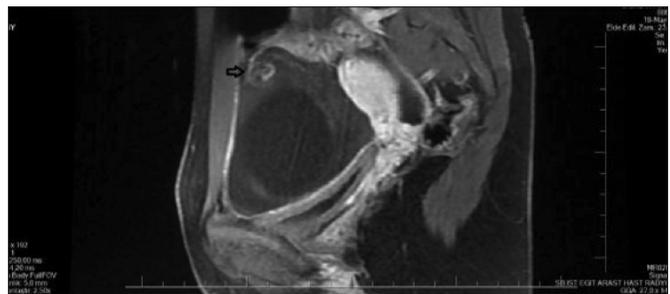


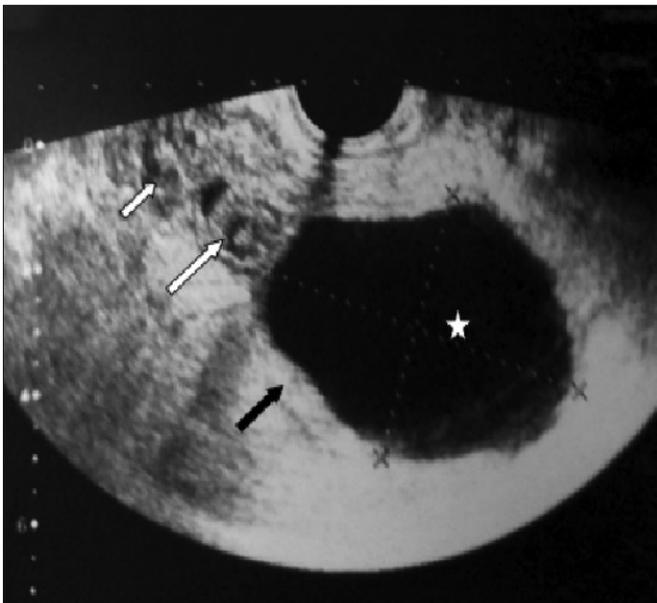
Figure 1. T1-weighted sagittal MR image. Torsion/rotation area in dilated tuba (arrow; mass image which is formed from concentric circles, whirpool sign)

**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 (asterisks; 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 specific 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 specific 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  $32.0 \pm 6.8$  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

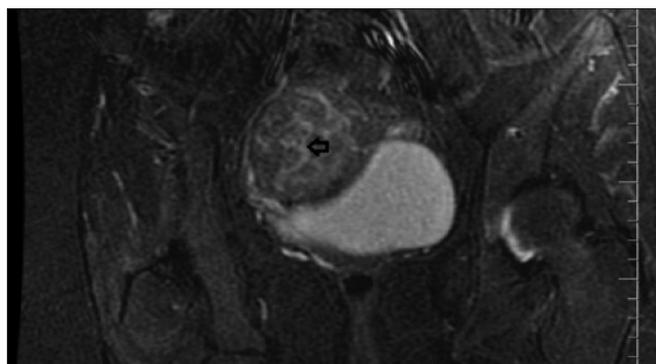
[PP-055]

## 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 marginated, 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 tortuos hyperintens areas with-



**Figure 1.** Diffusion weighted coronal section. No significant diffusion restriction in tumor. Tortuos hyperdens structures (arrow).



**Figure 2.** T2-weighted sagittal section. Uterus (black arrow), irregular hyperintens mass

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, mytosis 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 marginated, 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 tortuos hyperintens 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/dansity 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, angiomyolipoma, uterus, sonography

**Table 1. Previously reported cases in english literature**

Referance	Year	Age	Location	Size (cm)	Symptom	Pathology
Sienski	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 anautosomal 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 20thchromosome. 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 $\alpha$ (Gonal-F) and follitropin $\beta$ (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  $\alpha$  (Gonal-F) and follitropin  $\beta$  (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 alfa (n=151)	Follitropin beta (n=126)	p
Age (year)	29.30±4.31	31 (26;35)	0.821
Infertility duration (year)	5 (2;7)	4 (2;7)	0.840
Body Mass Index (kg/m <sup>2</sup> )	25.41±4.09	24.30 (23;28.05)	0.666
Indication for treatment, n (%)			0.269
Male factor	86 (57)	64 (50.8)	
Unexplained	52 (34.4)	51 (40.5)	
Tubalfactor	8 (5.3)	8 (6.3)	
Poor ovarian response	5 (3.3)	3 (2.4)	
Baseline FSH (mIU/mL)	7.68±1.83	6.82±1.40	0.401
Baseline E2 (pg/mL)	39.18±15.19	41.23±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±744	1742±559	0.012
Endometrial Thickness (mm)	9.50 (8.80;11.00)	10.38±2.05	0.824
Peak E2 (pg/mL)	1892 (1349;2507)	2434±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±4.17	8 (7;11.5)	0.020
2PN number	5 (3;9)	5 (4;9)	0.288
Fertilization rate (%)	69.70±23.42	65.90±20.80	0.066
Fertilized embryo number	5 (3;9)	5 (3;8.5)	0.324
Transferred embryo number, n (%)			
1 embryo	122 (80.8)	105 (83.3)	0.584
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±SD, and abnormally distributed data were given as median (IQR25; IQR75). 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 ± 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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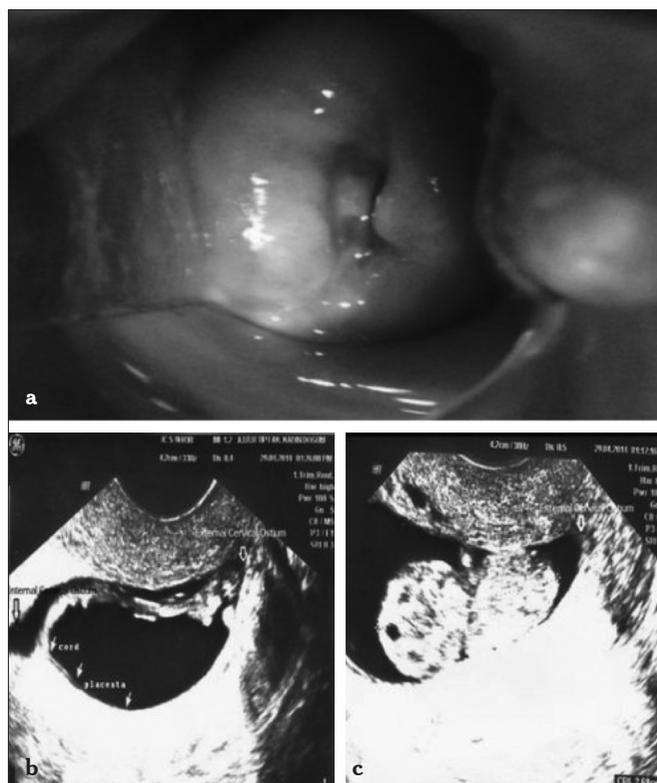
**Objective:** Cervical pregnancy is a rare form of ectopic pregnancy. It has a high rate of morbidity since it may be complicated with massive bleeding and even hysterectomy. Optimal mode of treatment is unclear. Here we present 3 cases of cervical pregnancies and their outcomes.

**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 (Figure 1b, c). Fetal heart beat was positive. With a diagnosis of cervical pregnancy, 50 mg/m<sup>2</sup> methotrexate(mtx) was administered intramuscularly(im) after informing the patient about the possible complications and risk of failure.  $\beta$ -hCG levels on 0, 4<sup>th</sup> and 7<sup>th</sup> days of mtx were 26543, 34754 and 23934 mu/mL respectively. On the 9<sup>th</sup> 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.  $\beta$ -HCG was 2716mu/mL at admission; 2123 and 1665mu/mL on day 4<sup>th</sup> and 7<sup>th</sup>, respectively. Although there was sufficient decline in  $\beta$ -HCG levels, we administered a second dose of mtx on day 7 to decrease the risk of failure. At weekly controls, her  $\beta$ -HCG values progressively declined and became negative at the end of 4weeks.

**Case 3:** A 30-year old woman who had in-vitro fertilization(IVF)+embryo transfer(ET) 33-days ago admitted with minimal vaginal bleeding.  $\beta$ -HCG values at 12<sup>th</sup> and 14<sup>th</sup> days of ET were 23 and 25 mu/mL, she was told by the IVF center that pregnancy was negative and  $\beta$ -HCG was not followed. 28 days after ET  $\beta$ -HCG was 1090 mu/mL, but she had vaginal bleeding.  $\beta$ -HCG showed good doubling(1900 mu/mL and 3200 mu/mL) but no intrauterine GS was present. At admission her  $\beta$ -HCG level was 2330 mu/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. Med-



**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

ical 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 triad is a part of caudal regression syndrome and presentation include partial agenesis of 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 multiparous 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 detected.

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.



Figure 1. Bilaterally extension of legs could be seen through second and third trimester



Figure 2. Pre sacral mass in third 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 newborn 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 Currarino 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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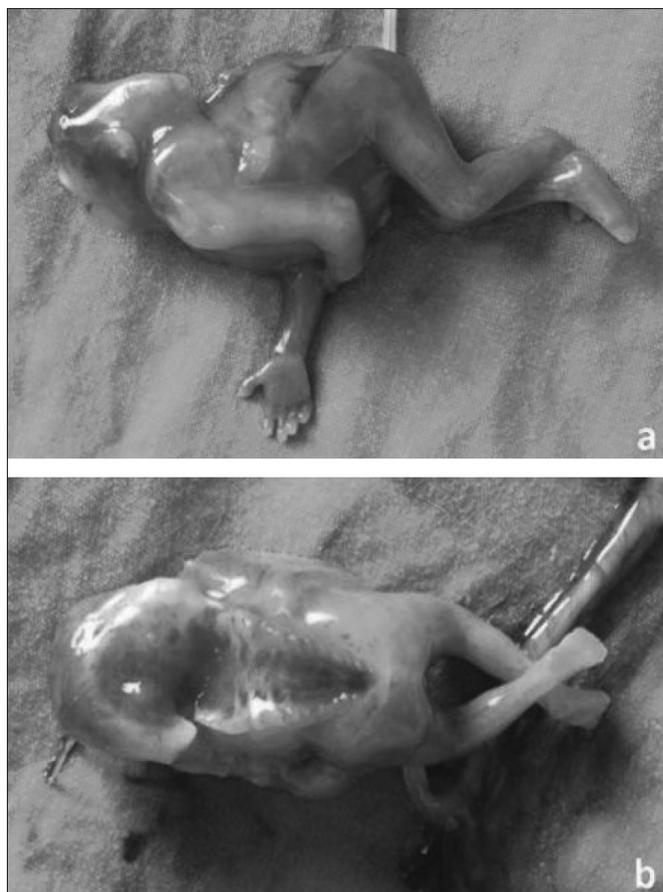
**Introduction:** Iniencephaly is a lethal neural tube defect which is recognized at first glance with the typical abnormal posture of the fetus. The classical findings are hyper extended neck (a stargazer appear-



Figure 1. Bilaterally extension of legs could be seen through second and third trimester

ance 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 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.



**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)

**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 female 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,13pstk+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  $33.94 \pm 10.37$  in USI;  $33.06 \pm 13.08$  in mixed incontinence (MI) and  $15.69 \pm 9.61$  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 urethrovesical 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 invitro 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

**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 <sup>2</sup> )	21	21.9	21
Baseline FSH (mIU/mL)	9	6.5	12.7
Baseline E2 (pg/mL)	45	24	26
Antral follicle count	11	10	10
Endication for IUI	Unexplained infertility	Unexplained infertility	Expected poor response
Gonadotrophic type	hMG	hMG	hMG
Stimulation day	10	10	10
Antagonist beginning day	8	8	8
<b>Follicle diameter on day 8<sup>th</sup> of stimulation</b>			
≥ 13 mm in diameter	5	8	6
≥ 14 mm in diameter	4	5	5
Total antagonist duration (day)	3	3	3
Total gonadotrophic dose (IU)	1200	975	1350
Peak E2 (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
Lutal support	P+ GnRH-a	P+ GnRH-a	P+ GnRH-a
Biochemical pregnancy	Yes	Yes	Yes
Ongoing pregnancy	Yes	Yes	No
Hmg: human menopausal gonadotrophine; P: progesterone; GnRH-a: gonadotrophin releasing hormone agonist			

4<sup>th</sup> day of stimulation and two days interval. Couples were informed about the cycle cancellation or conversion to IVF due to  $\geq 2$  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 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



Figure 1. Preop hand



Figure 2. After fasciotomies

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.

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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:** Helath 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 mono chorionic 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 1<sup>st</sup>-5<sup>th</sup> APGAR scores of 5-7 were delivered. At the surgery, placental abruption and a 6×6 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 1<sup>st</sup> and 2<sup>nd</sup> 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 3<sup>rd</sup> postoperative day. On following days, her renal functions progressively returned to normal. She was discharged on the 7<sup>th</sup> 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

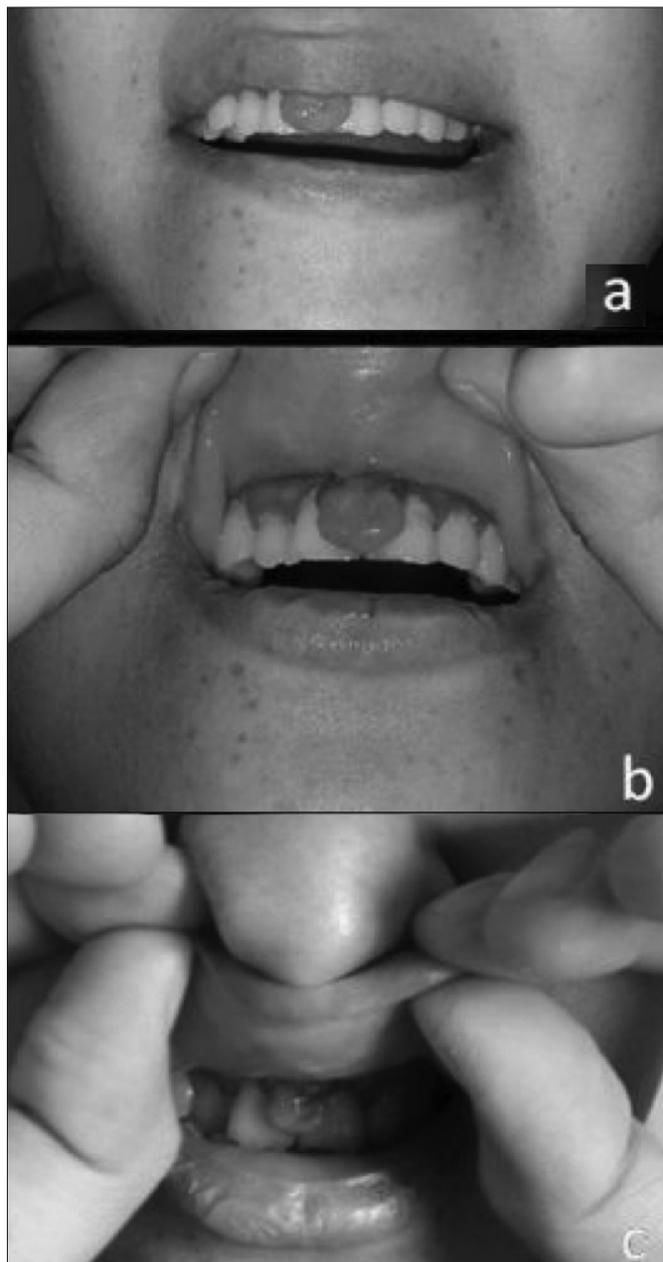
[PP-073]

## 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 pedunculat-



**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)

ed 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 40<sup>th</sup> 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 gestational 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 38<sup>th</sup> 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.

**Discussion:** Intrauterin transmigraton 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/mm<sup>3</sup> (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 12<sup>th</sup>. 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 12<sup>th</sup> weeks triamniotic trichorionic, gross fetal abnormality is not monitored, the pregnancy that is line with the nuchal translucient 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,

**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).

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 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 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 history 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



Figure 1. Intraoperative picture of endometriosis



Figure 2. Postoperative picture of the perineal incision

[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 prostoglandins 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 (TNFa), interferon-gam-

**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 <sup>2</sup> )	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)	<b>0,012</b>
Induction time (h)	12 (8; 12)	6(3; 12)	<b>0,0004</b>
Oxytocine time (h)	4,5 (0,8; 10,5)	10 (6; 13)	<b>0,0002</b>
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	<b>0,035</b>
APGAR	1. minute	8 (7,7; 9)	0,035
	5. minute	10 (9; 10)	<b>0,045</b>
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.

ma (IFNg), transforming growth factor-beta (TGFb), 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 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) endo-

metrial 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 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 IUFDs and anembryonic 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.

Table 1.

Mutation		LMWH + ASA treated N (%)	Untreated N (%)		
MTHFR					
Homozygous		18 (20.2%)	14 (21.9%)		
Heterozygous		34 (22.2%)	34 (53.1%)		
PT					
Homozygous		0 (0%)	0 (1.6%)		
Heterozygous		4 (4.5%)	3 (4.7%)		
FVL					
Homozygous		0 (1.1%)	0 (0%)		
Heterozygous		2 (2.2%)	1 (1.6%)		
Combined mutation		30 (33.7%)	11 (33.7%)		
Total		89 (100%)	64 (100%)		
Obstetric complications		LMWH + ASA treated N (%)	Untreated N (%)		
Intrauterine fetal demise (IUFD)		14 (33.3%)	31 (56.4%)		
Anembryonic pregnancy		6 (14.3%)	17 (30.0%)		
Gestational diabetes (GDM)		9 (21.4%)	2 (3.6%)		
Intrauterine growth retardation (IUGR)		3 (7.1%)	2 (3.6%)		
Preeclampsia		7 (16.7%)	2 (3.6%)		
Abruptio placenta		1 (2.4%)	0 (0.0%)		
Placenta previa		2 (4.8%)	1 (1.8%)		
Total		42 (100%)	55 (100%)		
		Odds ratio	95% CI for EXP(B)	p	
		Upper	Lower	Upper	
Step 1	Age	0.974	0.487	0.905	1.049
	Abortion history	1.471	0.159	0.859	2.520
	Combined mutation	1.766	0.137	0.834	3.741
	Constant	1.278	0.850		

**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 1<sup>st</sup> 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 management 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.

**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-

**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 <sup>2</sup> )	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	$\beta$	S.E.	Wald	P	OR	95% CI
Age $\geq$ 31	3.851	1.297	8.809	0.003	47.035	3.698-598.165
No. of previous C-section $\geq$ 2	3.357	1.406	5.700	0.017	28.692	1.824-451.293
No. of live children $\geq$ 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.

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 31<sup>st</sup> 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 flucortolone 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



Figure 1. Intraoperative image of the mass

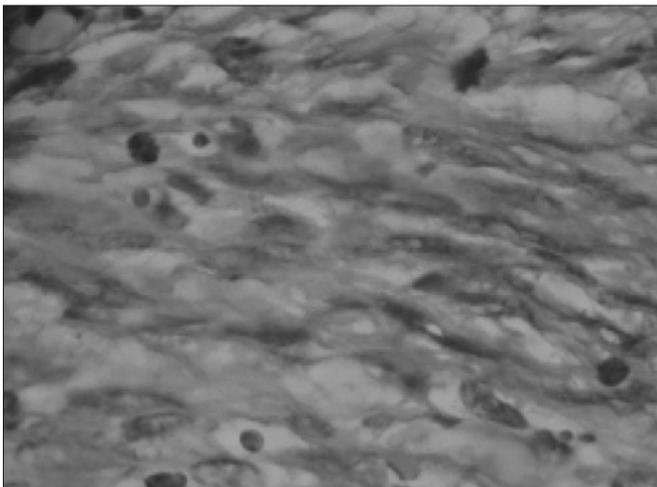


Figure 2. Histopathological evaluation by light microscopy H&E (40X)

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 salpingoophorectomy, 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 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 gland 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 5<sup>th</sup> 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	p
U/mL	Average±SD/Min.-Max./Median	Average±SD/Min.-Max./Median	
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)	P value
Age (years)	26.6±5.6	26.5±5.5	0.965
Body mass index (kg/m <sup>2</sup> )	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.

**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.

**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 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 <sup>2</sup> )	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: eryocyte 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  $40.7 \pm 12.23$  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 muscinous 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:  $36.4 \pm 5.9$ ), 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 kg/m<sup>2</sup> (range:  $29.2 \pm 3.1$ ). Hb values prior to the procedure and after were mean  $5.1 \pm 0.9$  units (range: 4-7) of erythrocyte suspension transfusion and the procedure was  $7.1 \pm 0.5$  g/dL (range: 6.0-8.2) and  $10.8 \pm 0.4$  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:  $1000 \pm 307$ ). 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)	$36.4 \pm 5.9$ (26-46)
BMI (kg/m <sup>2</sup> )	$29.2 \pm 3.1$ (24-36)
Prior abdominal surgery	8 (36%)
Pre-procedure Hb value (g/dL)	$7.1 \pm 0.5$ (6.0-8.2)
Post-procedure Hb value (g/dL)	$10.8 \pm 0.4$ (9.8-11.5)
INR	$2.4 \pm 0.6$ (1.09-3.25)
Amount of blood drained (ml)	$1000 \pm 307$ (650-1800)
Amount of blood transfusion (units)	$5.1 \pm 0.9$ (4-7)
Duration of hospitalization (day)	$6.4 \pm 0.8$ (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

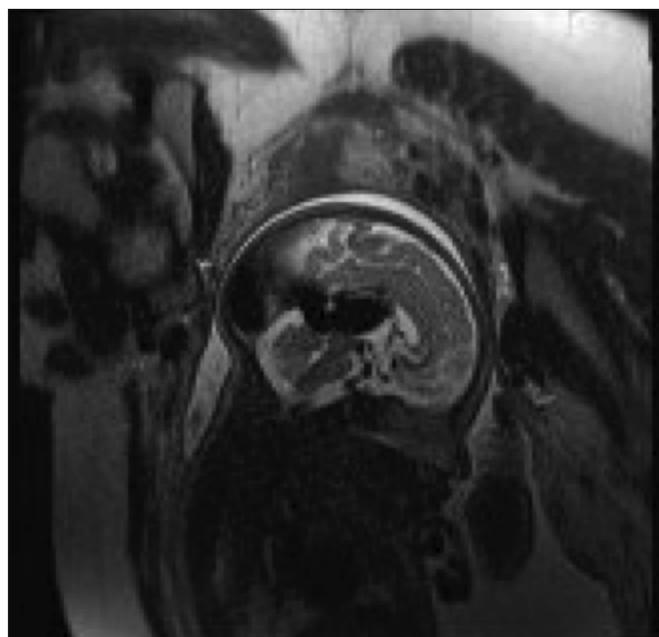


Figure 2. T2-weighted Fetal Magnetic Resonance Image

**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 ( $0.71 \pm 0.27$  MoM vs.  $1.20 \pm 0.54$  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±SD or %)	Term group, n=14 (mean±SD or %)	p
11-12. weeks			
Cervical length (mm)	48.5±10.5	52.8±10.6	NS
Cervikal volume (mm <sup>3</sup> )	22504±13837	28497±10763	0.020*
15-16. weeks			
Cervical length (mm)	45.5±10.5	45.5±10.5	NS
Cervikal volume (mm <sup>3</sup> )	21139±13517	21139±13517	
19-20. weeks			
Cervical length (mm)	48.7±11.2	47.3±8.9	
Cervikal volume (mm <sup>3</sup> )	22714.3±7810	21343±9723	NS
23-24. weeks			
Cervical length (mm)	47.6±11.0	48.1±10.5	
Cervikal volume (mm <sup>3</sup> )	23983±12227	24390±13430	NS
PAPP-A	0.719±0.266	1.203±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 5<sup>th</sup> and 15<sup>th</sup> 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 <sup>th</sup> min=III	46 (58-38) II→III	>0.05
	II→IV	<0.001
Intraop 15 <sup>th</sup> 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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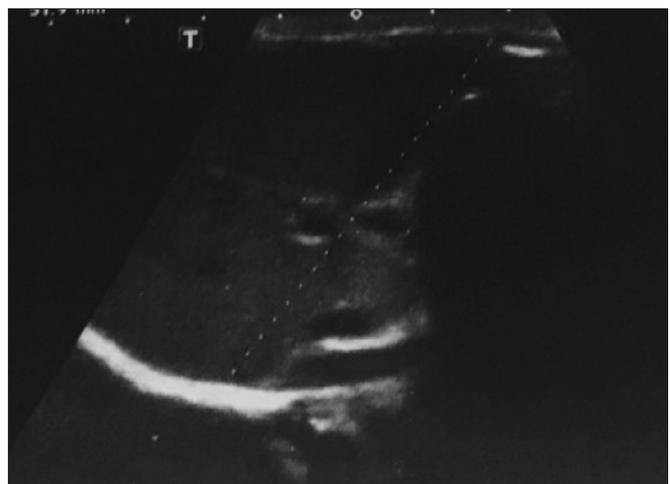
**Introduction:** Abdominal cysts diagnosed antenatally represent both normal variants and pathological entities. The most common imaging modality used for antenatal scanning is ultrasound (1). Here we present a case of an enteric duplication cyst detected on antenatal period by ultrasound exam.

**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 24<sup>th</sup> 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 5<sup>th</sup> pregnancy. She declined antenatal screening tests for aneuploidy. Course of the pregnancy was uneventful until 14<sup>th</sup> 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 26<sup>th</sup> 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 384/7 weeks

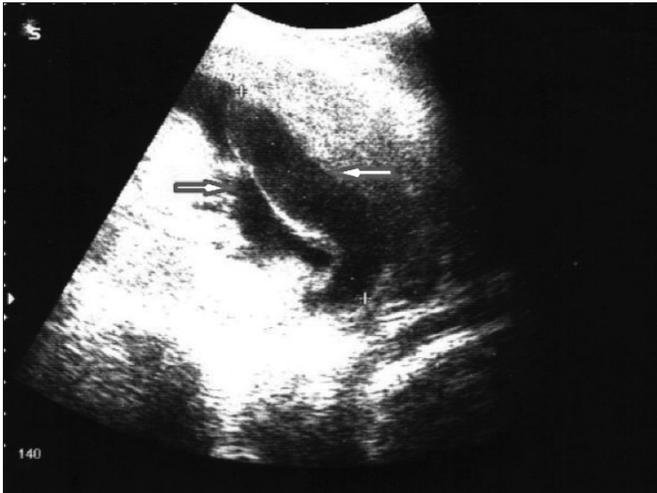


Figure 1. A crescentic shaped subchorionic hematoma

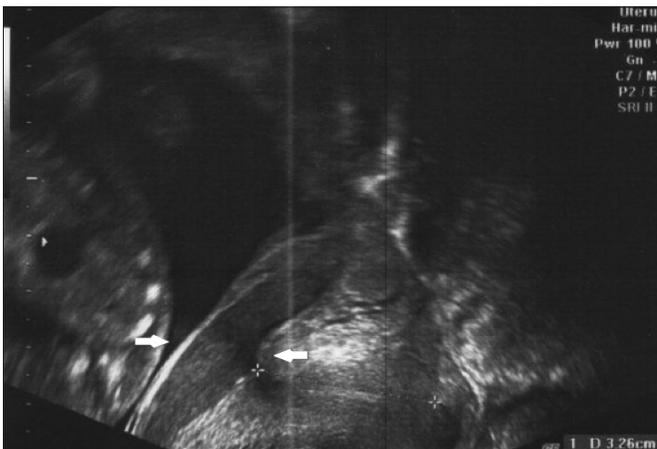


Figure 2. A subchorionic hematoma located above the internal cervical os

of pregnancy.

**Case 2:** A 21-year old primigravid woman admitted at her 20<sup>2</sup>/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 hydatid 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

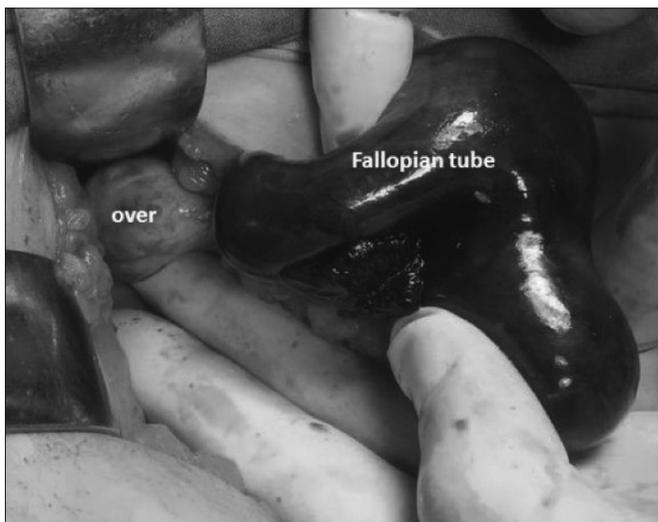


Figure 1. Intraoperative appearing

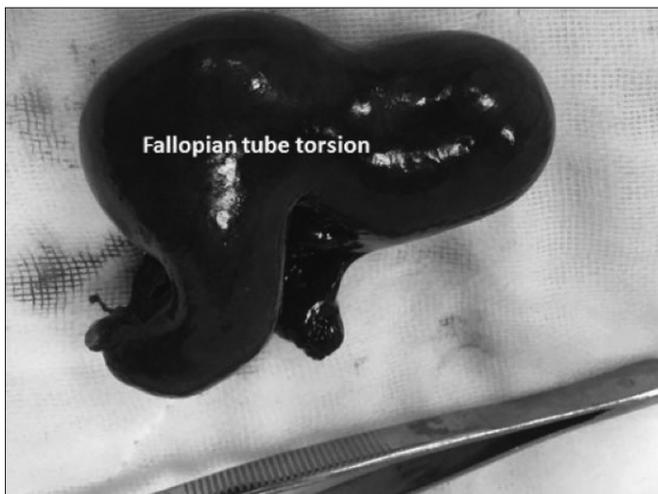


Figure 2. Pathology specimen after excision

[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

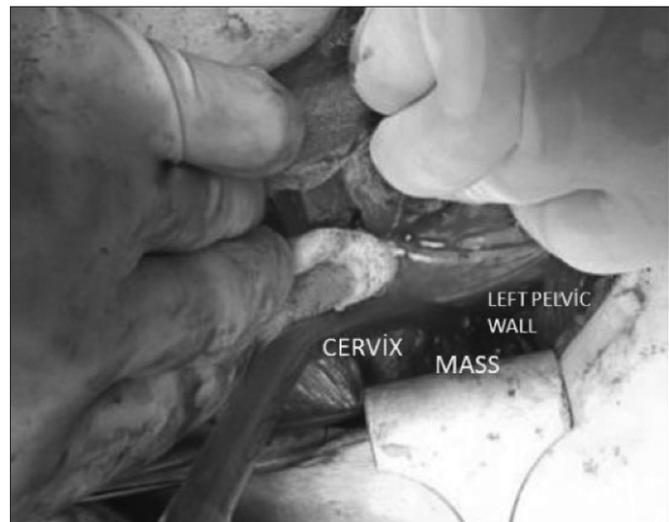


Figure 1. Intraoperative appearing

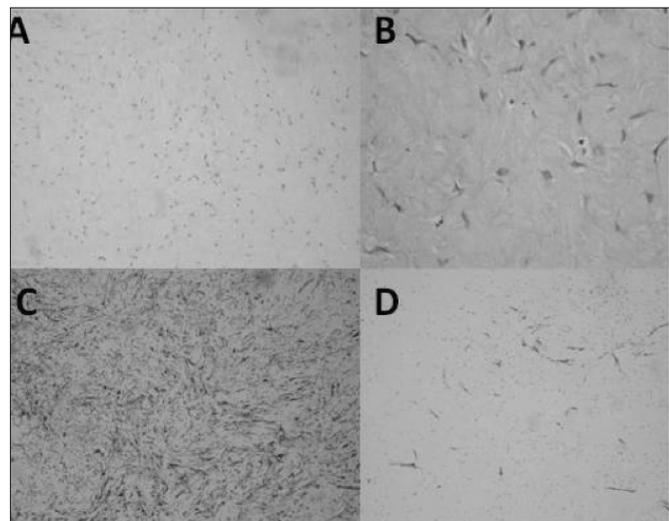


Figure 2. Pathologic evaluation. Higher magnification showing sparse spindle-shaped cells with bland nuclei (a) (HE, ×400), both areas inside the nodule are composed of epithelioid cells with abundant eosinophilic cytoplasm (b). Nuclear enlargement is observed, but mitotic figures are not apparent. Spindle-shaped 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 peri-neal 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]

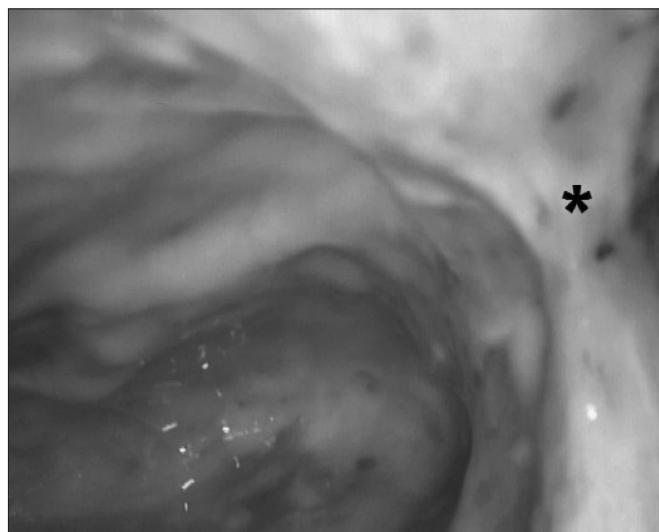
Management of tuboovarian abscess and diffuse peritonitis due to streptococcus constellatus infection via laparoscopic abscess drainage and easily occurrence of serosal injury of bowel

Hakan Erenel, Suat Karatas

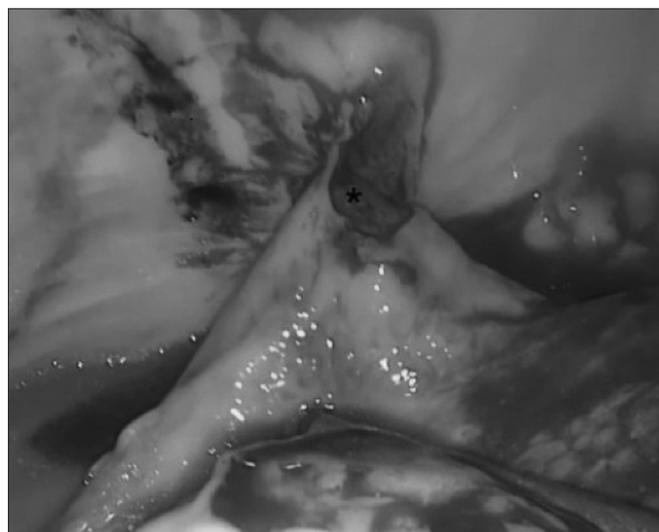
*Şişli Hamidiye Etfal Training and Research Hospital, İstanbul, Turkey*

**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.

#### References

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2. Ness RB, Kip KE, Hillier SL, et al. A cluster analysis of bacterial vaginosis-associated microflora and pelvic inflammatory disease. *Am J Epidemiol* 2005; 162: 585-90.

**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 Trizomy 21 and Trizomy 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 entegrated.

**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

omy, 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

NRL	Group				p	
	Study		Control			
Cut-off	n	%	n	%		
< 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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Minia University School of Medicine, Minya, Egypt

**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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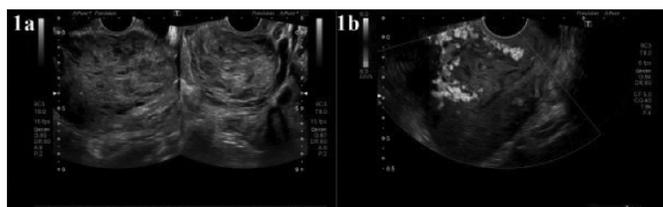
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**Introduction:** Uterine arterio-venous malformation (AVM) is defined as abnormal and non-functional connections between the uterine arteries and veins. Acquired AVMs are often associated with previous uterine surgery (dilation and curettage (D/C)), 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.

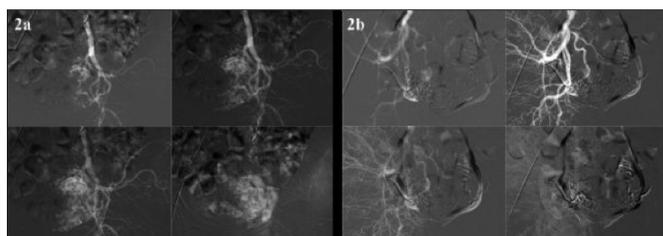
We report a case of acquired AVM (after D/C) with an extensive lesion, which was successfully treated with UAE.

**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 cm<sup>3</sup>) 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 cm<sup>3</sup>) 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 cm<sup>3</sup>) 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
İnsulin (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 <sup>2</sup> )	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	Triglycerid	0.046	0.270	BMI	Triglycerid	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	Triglycerid	0.012	0.335	HOMA-IR	Triglycerid	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
Triglycerid	HDL-C	0.001	-0.423	Triglycerid	HDL-C	0.001	-0.482
Triglycerid	HOMA-IR	0.012	0.335	Triglycerid	HOMA-IR	0.001	0.536
Triglycerid	Insulin	0.017	0.321	Triglycerid	Insulin	0.009	0.404
Triglycerid	LH	0.039	-0.279	Triglycerid	LH	0.750	-0.052
Total-C	LH	0.990	0.002	Total-C	LH	0.656	0.073
Total-C	Triglycerid	0.001	0.506	Total-C	Triglycerid	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 threes. 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. Congoined 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

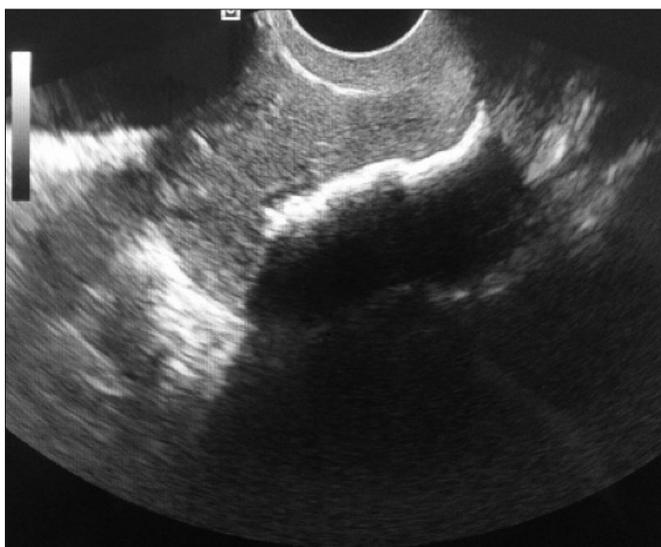


Figure 1. Endometrial calcification on ultrasonographic appearance



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 woman 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, 1<sup>st</sup> and 5<sup>th</sup> 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 caseating 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-

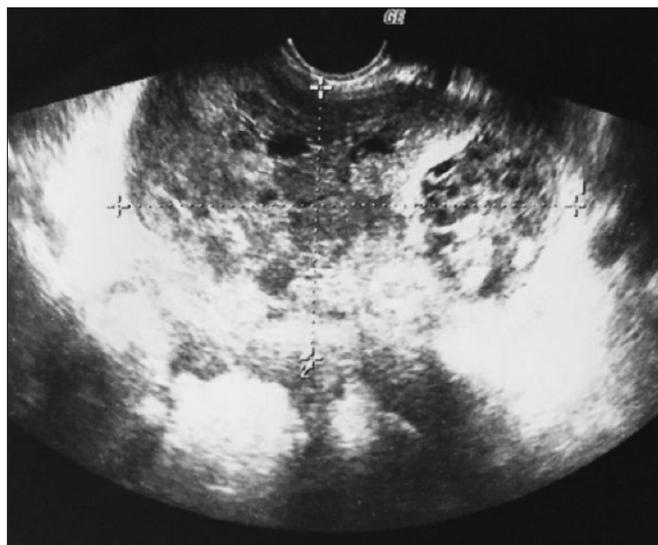
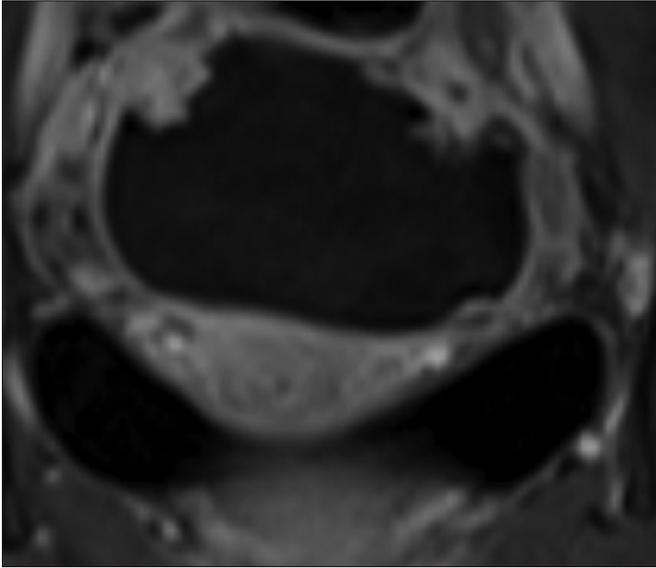


Figure 1.



**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

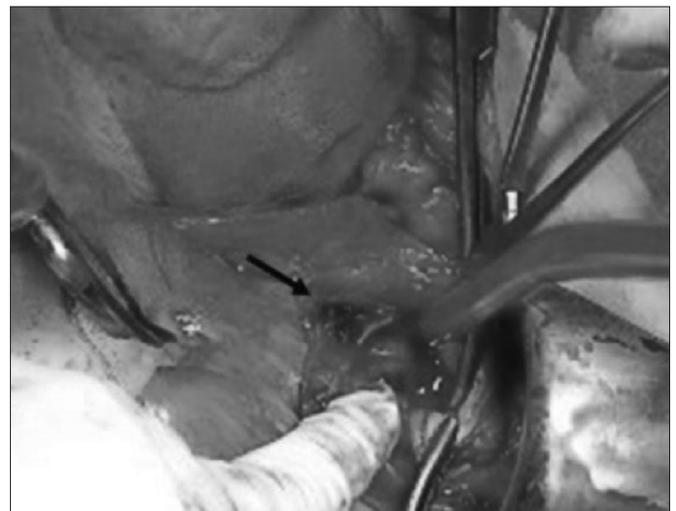
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**Background:** In recent years, the incidence of caesarean sections increased and occurrence of the phenomenon 'niche', also defined as cesarean scar defect, has attracted attention. Incidence of niche is directly related to the number of previous 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 cesarean 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 cesarean 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  $\beta$ 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/mm<sup>3</sup>, 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]

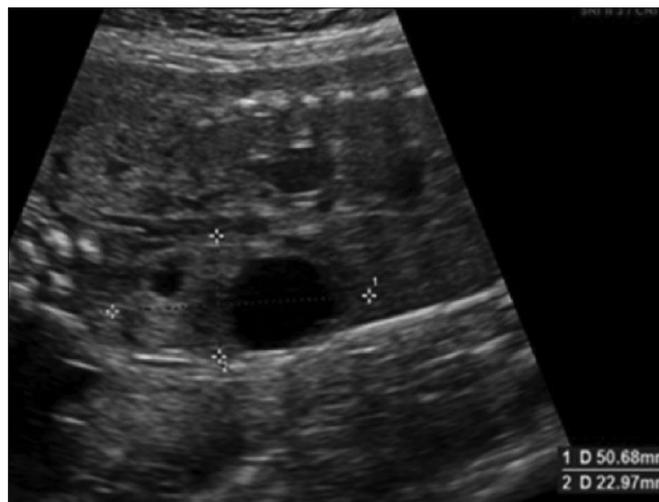
## Prenatal ultrasonographic diagnosis of bilateral duplex renal system: A case report

Zafer Kolsuz, Mustafa Şengül, Hüseyin Aydoğmuş, Gazanfar Mammadov, Kutlu Kurt, Raziye İri, Sefa Keleşçi

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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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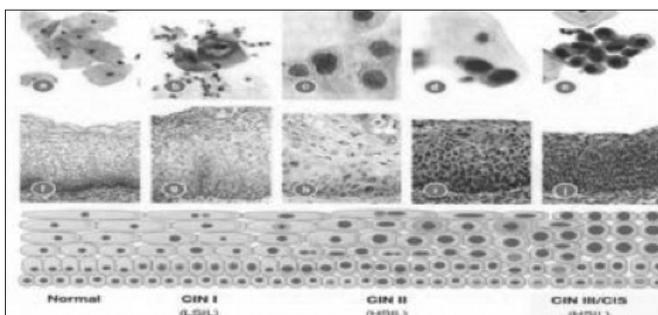
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**Objective:** Cervicovaginal cytology, abnormal results of which consists of premalignant or malignant cervical lesions, is a widely used, cost effective and efficient screening tool for early diagnosis of cervical lesions. The aim of the study is 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  $39 \pm 5.2$  years. Mean parity was  $4.82 \pm 2.54$  and mean gravida was  $5.41 \pm 3.68$ . Of the patients, 21 (20%) were smokers. Mean age at first coitus was  $22 \pm 7.34$  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



**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%)	-	-

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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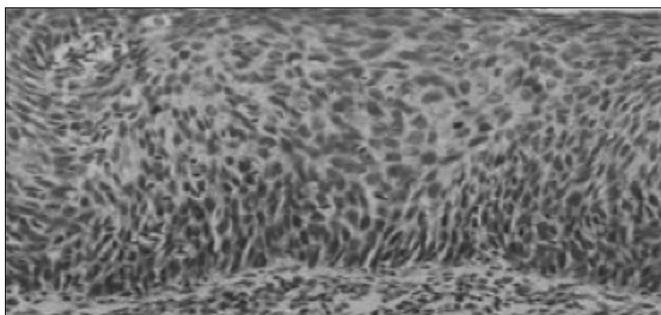
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**Objective:** Cervical cancer is the second most common malignancy affecting women in worldwide. Cervical cancer screening is still at the centre of prevention and has a crucial role to decrease morbidity and mortality. Nowadays testing for oncogenic 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 woman 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. 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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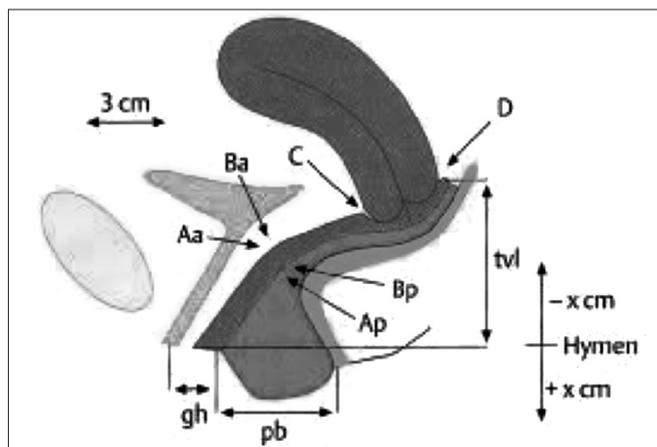
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**Objective:** Pelvic organ prolapse (POP), which is defined as the descent of female pelvic organs (bladder, uterus, vaginal cuff, small or large bowel) from the normal anatomic location toward or through the vaginal opening, is a common condition 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 (m<sup>2</sup>). 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  $\chi^2$ -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  $\geq 2$  patients ( $p < 0.05$ ). On the contrary, in obese group; stage  $\geq 2$  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

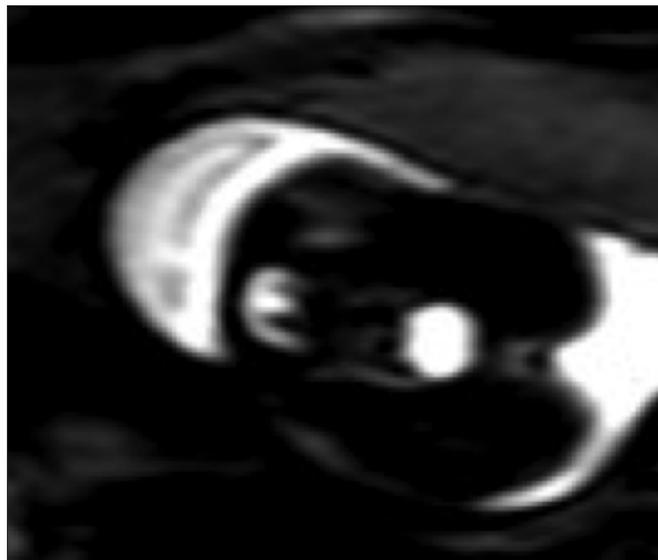


Figure 1. MR image

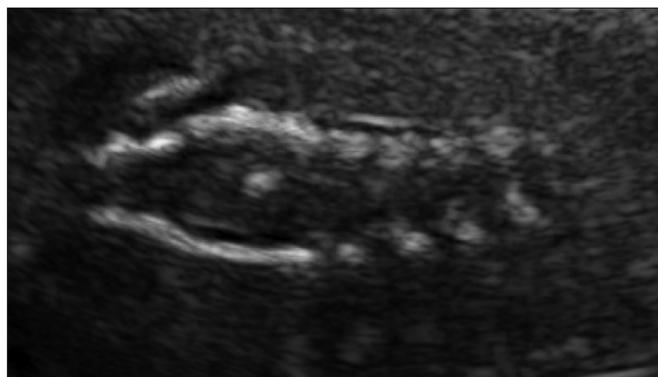


Figure 1. USG image

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 with dividing 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

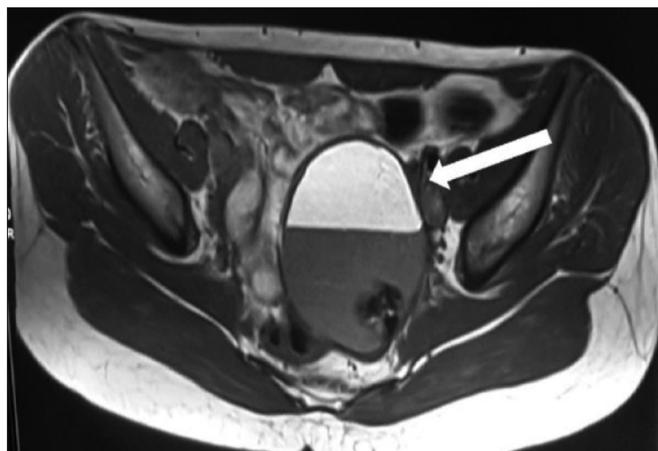
[PP-159]

## Mature cystic teratoma of the ovary coexisting with tubal ectopic pregnancy: a case report

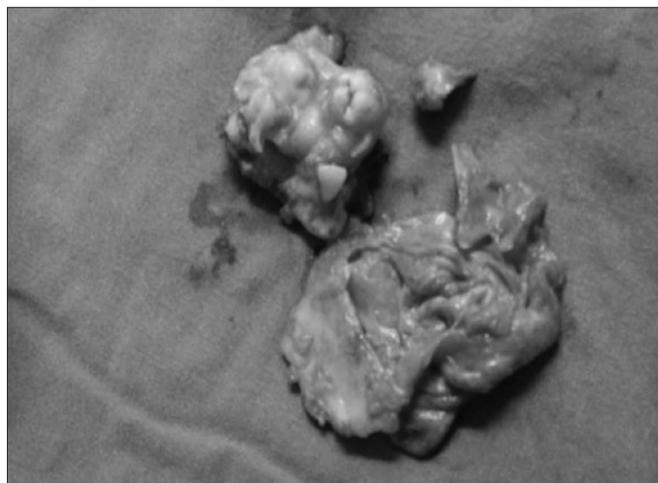
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Although mature cystic teratoma (dermoid cyst) of the ovary and ectopic pregnancy are common gynecologic disorders in women of reproductive age, the coexistence of these two pathologies is an unusual case. We present a 26-year-old nulligravid woman 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 placentar 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 placentar 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-

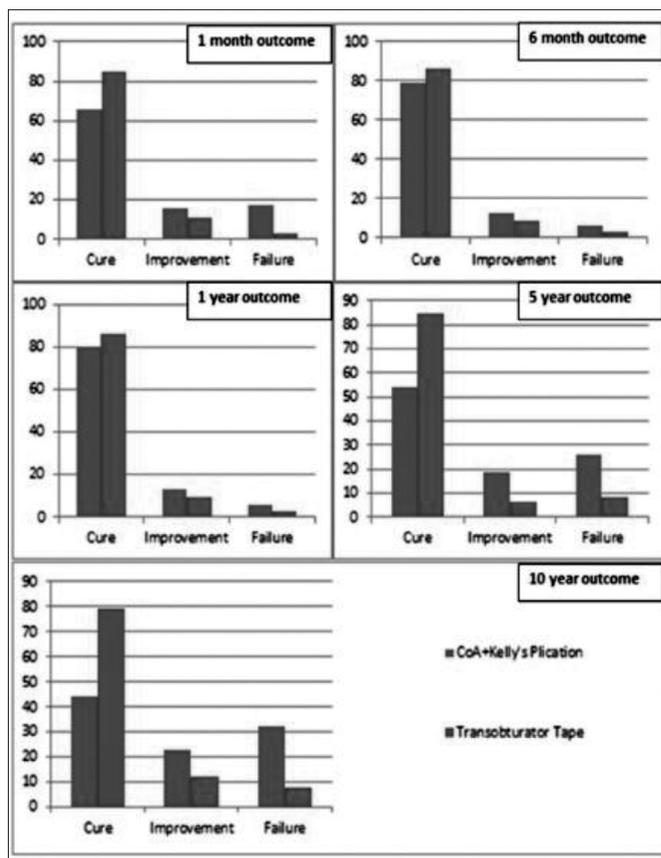


Figure 1. Outcomes of surgical procedures

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/mm<sup>3</sup>, 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 surgent 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/m<sup>2</sup>; 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 <sup>2</sup> )*	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-

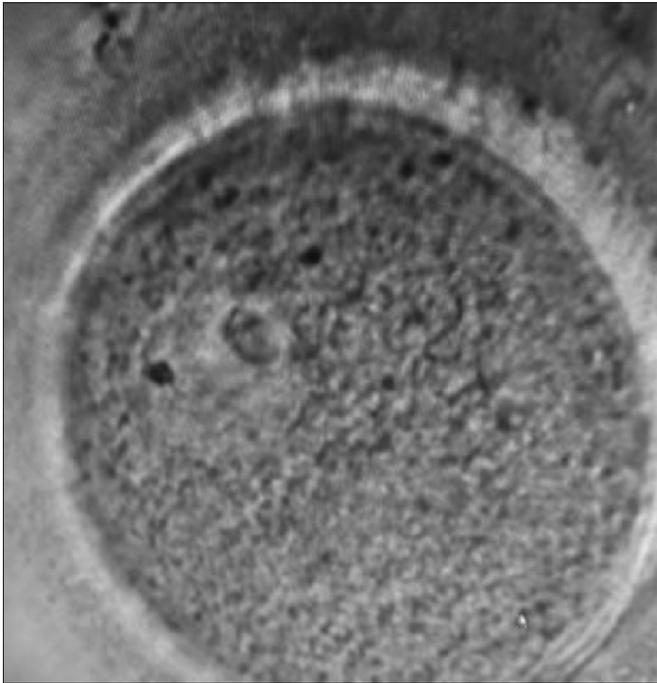


Figure 1. Germinal vesicle



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 encubated 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 was 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

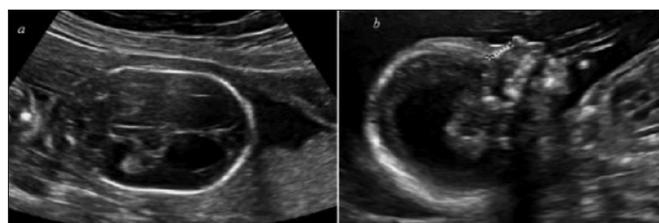


Figure 2. Transverse plane showing absent cavum septum pellucidum (a), sagittal plane showing isolated complete corpus callosum agenesis (b)

[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. Ampicilin 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, live 1 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 cloth 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 <sub>3</sub> (pg/mL)*	3.16±0.49	3.17±0.33	0.87
fT <sub>3</sub> (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 bHCG 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 platinum 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  $42.60 \pm 2.76$  years. The mean time interval between hysterectomy and detection of adnexal mass was found to be  $26.48 \pm 39.01$  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  $58.22 \pm 23.94$  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  $5.93 \pm 4.47$  months. It was seen that the mean age of patients at the time of second surgery was  $46.45 \pm 4.05$  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. ( $5.96 \pm 1.53$  vs  $6.66 \pm 1.69$ ) ( $p=0.005$ ). Retrieved oocyt number, fertilised oocyt number, transferred embryo number, embryo grade and quality did not showed statistical difference. Only mature oocyt number was significantly higher ( $7.33 \pm 4.17$  vs  $6.12 \pm 3.64$ ) ( $p=0.042$ ). 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 showed a statistical difference.

**Discussion:** In stimulated IVF cycles because of the oocyt aspiration granulosa cell number decreases, luteinisation fails and estrogen and progesterone levels decreases 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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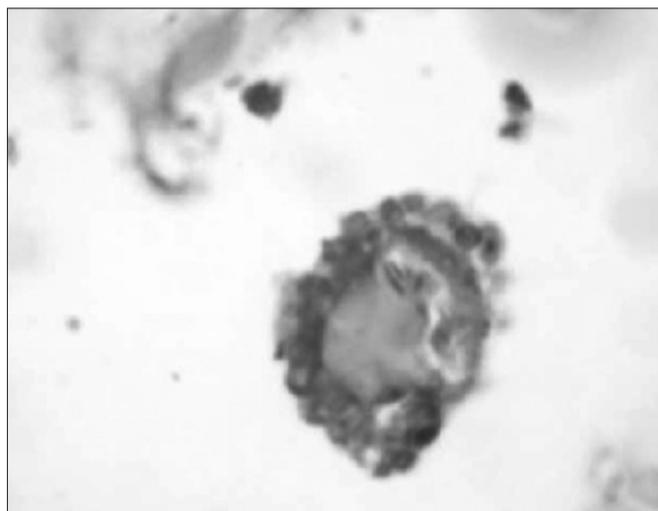
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Hydatid disease is an endemic common parasitic infection mostly affecting the liver and the lungs. Pelvic disease is rarely reported and



**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

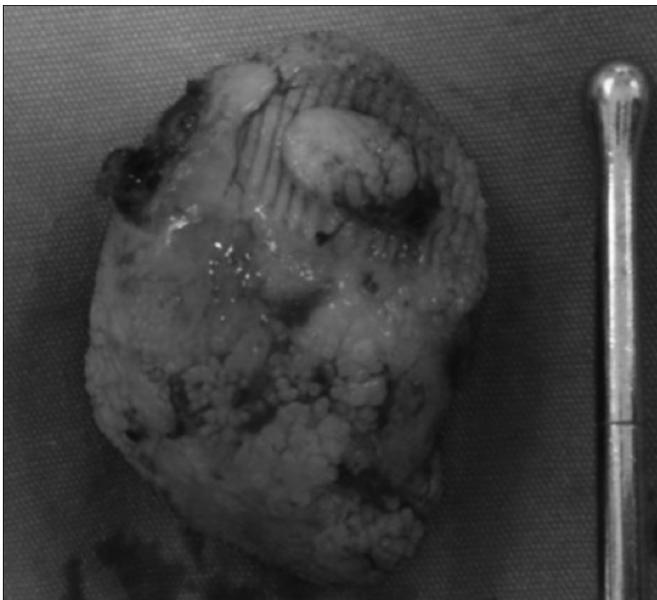


Figure 1. Polyp



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 histopatological examination must be done especially for the fast-growing polyps because they have approximately %1 of neoplastic alteration risk. In routine gynelological 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-



**Figure 1.** Extraperitoneal leiomyoma of the left round ligament

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

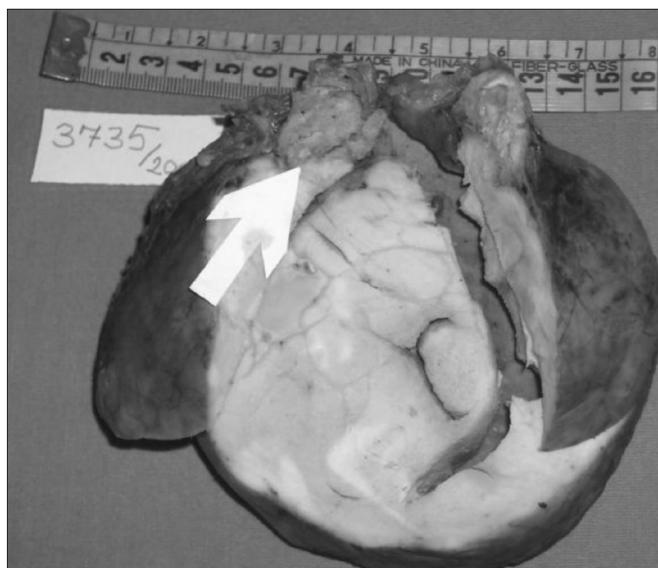
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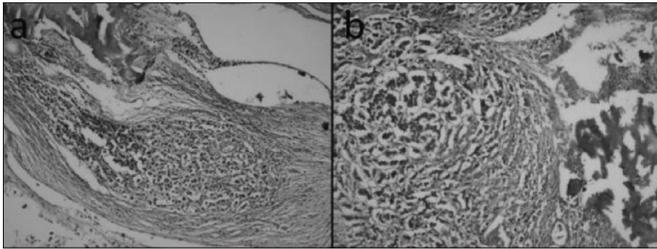
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Swyer syndrome is a rare disorder characterized by a phenotypic female with an XY karyotype. We presented a patient with Swyer syndrome with a diagnosis of malign germ cell tumor. After bilateral gonadectomy and pelvic lymph node dissection, the patient 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.** 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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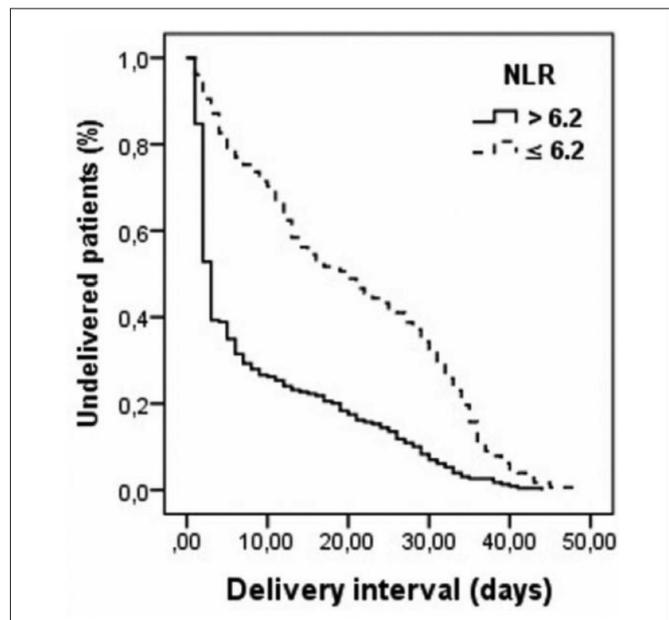
**Objective:** The aim of our study is to assess whether serum markers would be useful as a new predictor of preterm birth in patients with spontaneous late preterm labor.

**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 ( $\leq 6.2$  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 adnexial 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 salpingooferectomy, 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

[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.

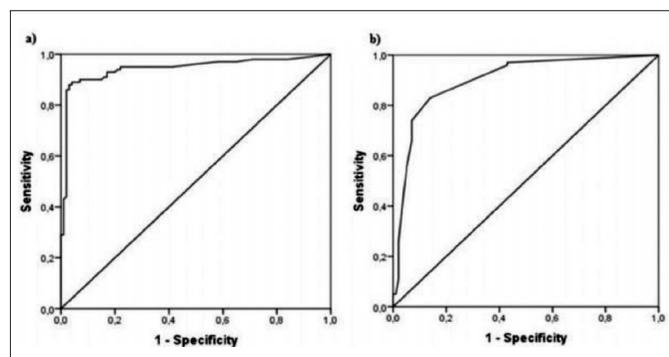
**Material and Methods:** A prospective study conducted with 100 pregnant women with PPRM and 100 healthy pregnant women between 24+0 and 36+6 gestational weeks. All patients underwent sampling for urea and creatinine concentrations in vaginal fluid at the time of admission. Receiver operator curve analysis 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

**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



**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.

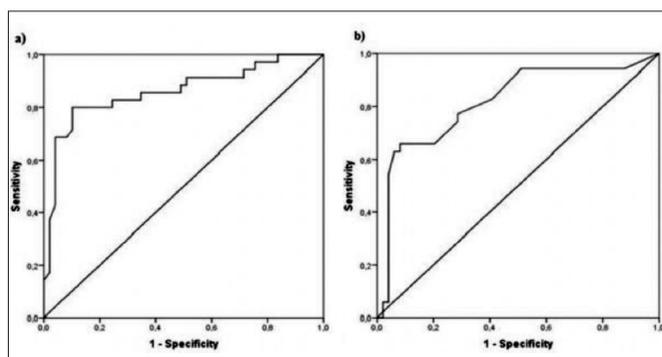
**Conclusion:** Measurement of urea and creatinine levels in vaginal fluid is a rapid and reliable test for diagnosing and also for predicting delivery interval after PPRM.

**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
Kafali 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
Tighi 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**

[PP-188]

## Decreased maternal serum Netrin-1 levels as a new predictor of preeclampsia

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**Objective:** The aim of this study was to investigate whether the netrin-1 levels in maternal serum was associated with presence of preeclampsia.

**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 preeclamptic 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]

## 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),



Figure 1.



Figure 2.

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 diaphragma 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-

**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  $32 \pm 9.4$  years. Mean parity was  $3.12 \pm 1.54$  and mean gravida was  $4.28 \pm 2.48$ . 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 chromomes 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 competetive 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 postmenapousal 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 (β=0.450, p<0.05; β=0.558, p<0.01; β=0.546, p<0.01; β=0.428, p<0.05; β=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

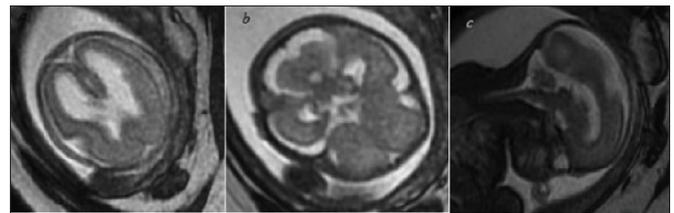


Figure 2. a-c. Prenatal T2-weighted axial and sagittal MRI of aqueductal stenosis. Shown is the fetus in utero with enlarged lateral ventricles (a), axial view of enlarged lateral ventricles and normal fourth ventricle (b), obstruction is present in the distal third of the aqueduct (c)

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 gonadotrophines (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 (%)			<b>0.003</b>
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)	<b>0.028</b>
Transferred embryo number, n (%)	<b>n = 241</b>	<b>n = 91</b>	
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 were 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/m<sup>2</sup>) and normal weight (BMI between 18.5-24.99 kg/m<sup>2</sup>) 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  $\geq 30$  kg/m<sup>2</sup>) and non-obese (BMI  $< 30$  kg/m<sup>2</sup>). 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/m<sup>2</sup>) and 121 non-obese (BMI  $< 30$  kg/m<sup>2</sup>) 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**

	<b>Obese group; BMI &gt;=30 kg/m<sup>2</sup> (n=41)</b>	<b>Non Obese Group; BMI &lt;30 kg/m<sup>2</sup> (n=121)</b>	<b>p</b>
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, 1<sup>st</sup> and 5<sup>th</sup> 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 ( $0.23\pm0.05$  vs  $0.21\pm0.04$ ,  $p=0.050$ ). 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 gonadotropin 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  $7.79\pm0.39$  (6.5-8.0), volume of semen was  $2.34\pm1.46$  (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 unrupture 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 a 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 was 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);  $32.05 \pm 3.7$  kg/m<sup>2</sup> 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 laseration) (1.7%), mean hospital stay was  $2.9 \pm 1.09$  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 <sup>2</sup> )	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

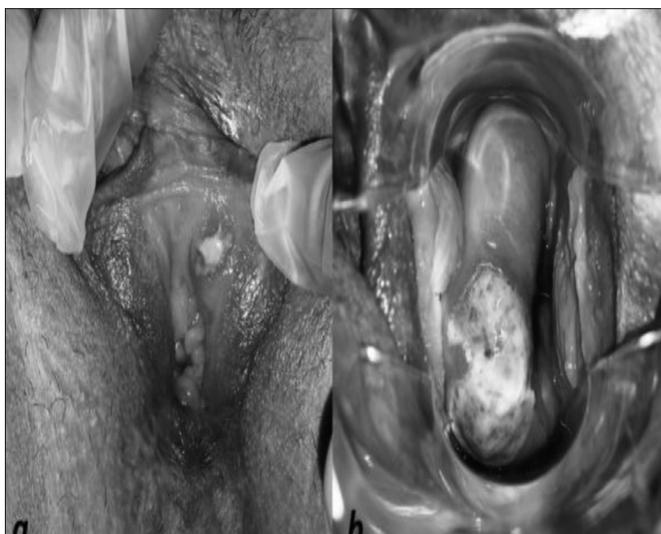


Figure 1. a, b. Ulcer inside of the left labia minora (a), cervical ulcer (b)

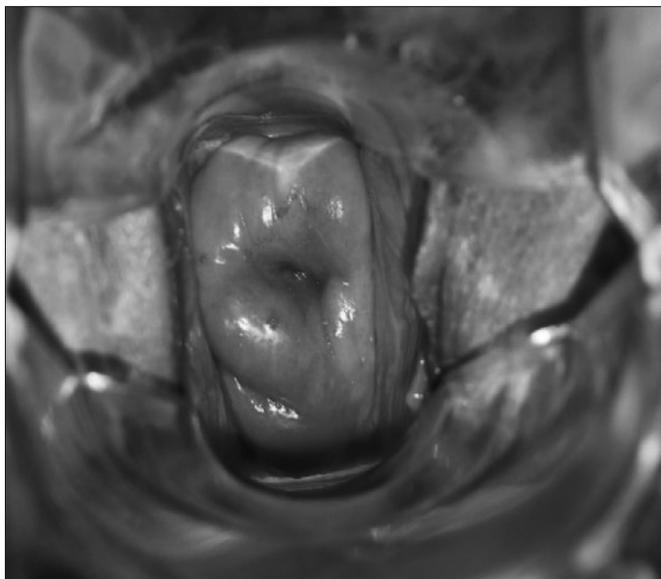


Figure 2. The cervix after the treatment for Behcet's disease

transmitted diseases such as genital herpes, syphilis, chancroid, lymphogranuloma 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 Methos:** 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 12<sup>th</sup> 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 11-136 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 ( $31.9 \pm 3.8$ ) is higher than the

spontaneous group ( $28.1 \pm 4.7$ ), 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 ( $12.1 \pm 0.5$  weeks in the spontaneous pregnancies and  $12.2 \pm 0.6$  weeks in ART cycle pregnancies) and the CRL measurement ( $59.9 \pm 7.4$  mm in the spontaneous pregnancies and  $61.1 \pm 6$  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.



Figure 1. Sirenomelia 1



Figure 1. Sirenomelia 2

**Table 1. The epidemiological characteristics, first trimester crl 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

**Conclusion:** In some studies, it is claimed that the hormonal stimulation 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 tenderness 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]

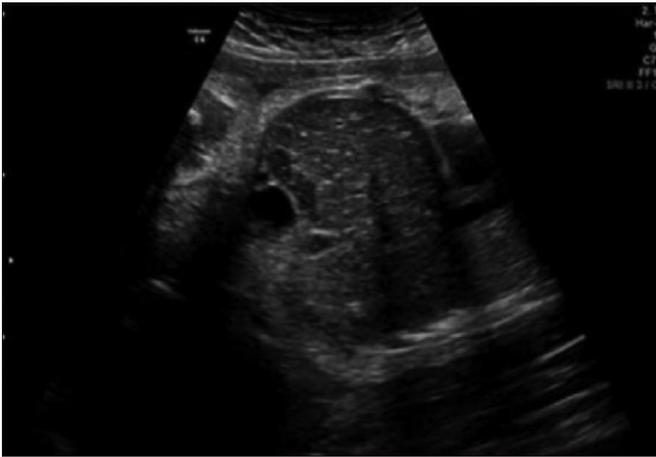
## Isolated fetal hepatic calcification associated with trisomy 21 in the third trimester

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**Introduction:** Isolated fetal hepatic calcification may be detected coincidentally 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



**Figure 1. Multiple fetal hepatic parenchymal calcifications**

the etiology of hepatic calcification and all resulted negative. Karyotyping 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.

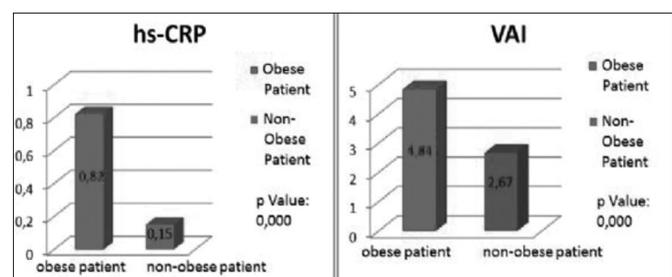
**Material and Methods:** Seventy five patients who were admitted with complaints of absence of menstruation, hirsutism or increased body-weight to Mustafa Kemal University Obstetrics and Gynecology outpatient clinic and diagnosed as PCOS according to the criteria of Androgen Excess and PCOS Society 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  $\geq 25$  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



**Figure 1. Comparison of hs-CRP and VAI values of obese and non-obese cases in PCOS group**

index (VAI)  
[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 dens 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

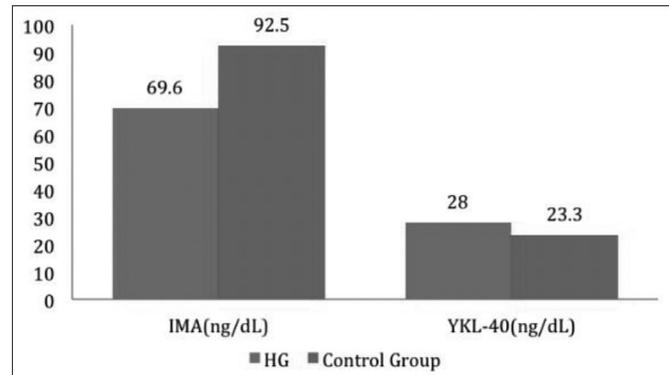


Figure 1. Comparison chart of the levels of patients with HG and the control group

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 1<sup>st</sup> group 22 of 1239 in the 2<sup>nd</sup> group 14 of 325 and in the 3<sup>rd</sup> 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-incident 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 <sup>th</sup> 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	Mozaic 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

2was 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 paediatric 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 37<sup>th</sup> 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 serous 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 a 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 not enough work in this regard and never been studied before. Increased pregnancy complications: abortion, small gestational age, intrauterine growth restriction, preeclampsia, 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/mm<sup>3</sup> and C-reactive proteins were low. Endocervical curettage and probe curettage were performed under general anesthesia. Doxycyclin 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/mm<sup>3</sup>, 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

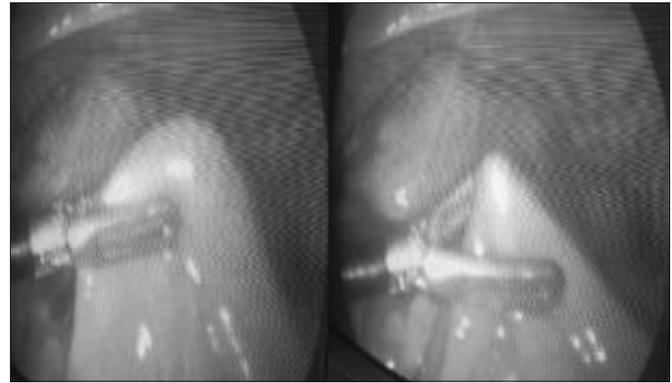


Figure 1. Intraoperative view of IUD invaded to ileum in laparoscopy



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 (0.21%)	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/m<sup>2</sup>. 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 presented 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:  $11.6 \times 10^9/L$  white blood cells (WBCs),  $4 \times 10^{12}/L$  red blood cells (RBCs), 9.11 g/dL hemoglobin (HGB), and  $322.0 \times 10^9/L$  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 parafallopian cyst (Figure 2). The ovaries and left fallopian tube were normal in appearance. After surgical detorsion salpingectomy was performed because of presence of necrosis and bleeding from necrotic sides. Left parafallopian cystectomy was also performed. The postoperative period was uneventful and the patient was discharged on the thirth postoperative day in good condition. The histopathology report hemorrhagia and necrosis of the right

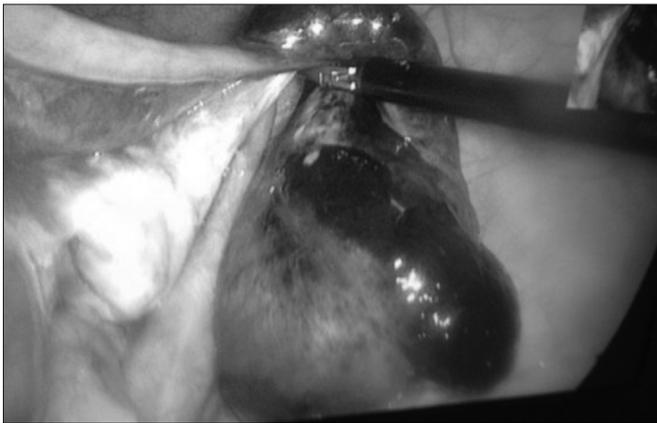


Figure 1. Isolated tubal torsion

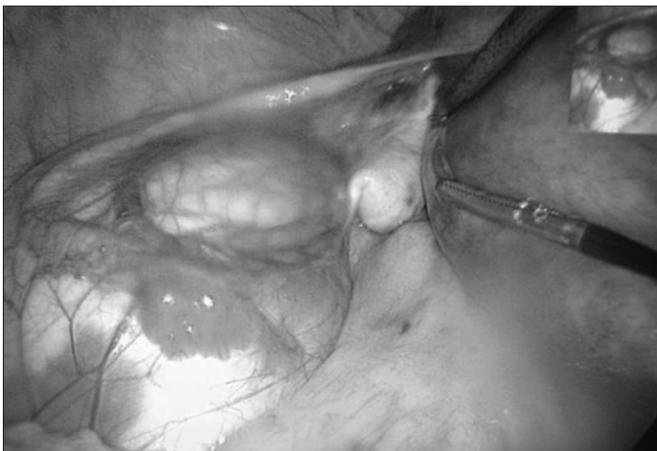


Figure 2. Parafallopian cyst

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]

## Manengment 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 skin<sup>1</sup>. The reported mortality rate varies widely in the literature, ranging 13% to 50%<sup>2, 3, 4</sup>. 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 10<sup>12</sup>/L, Hb: 11 g/dL, Hct: 31.8, Plt: 267,8 10<sup>9</sup>/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 m and wet dressing. Regular wet dressing was done along with topical application of hydrogen peroxide, povidone iodine and physiological saline solution and honey. On 6<sup>th</sup> postoperative day we saw purulent discharge and necrotic areas, thereby on 7<sup>th</sup> postoperative day second debridement has done (Figure 2). Postoperative 52<sup>nd</sup> day her wound was reconstructed with secondary suturing. She was discharge from the hospital on 63<sup>th</sup> 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



Figure 1. Fournier's gangrene



Figure 2. Patient before secondary suturation

[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 dysmenorrhoea, chronic pelvic pain and infertility. It is most commonly localized in pelvis (ovaries, peritoneal uterosacral ligaments, Douglas's pouch 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 abdominalis 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.

**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



Figure 1. Pathology specimen after excision

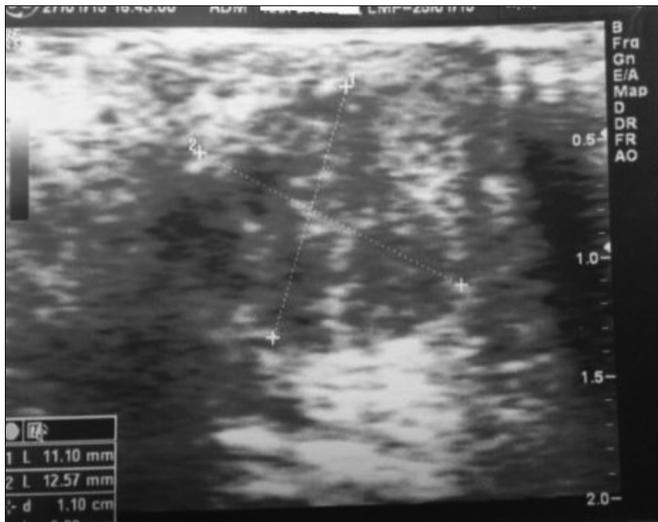


Figure 2. Ultrasound figure

[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 resonance imaging (DW-MRI). Relationships between variables were analyzed using the multiple linear regression analysis.

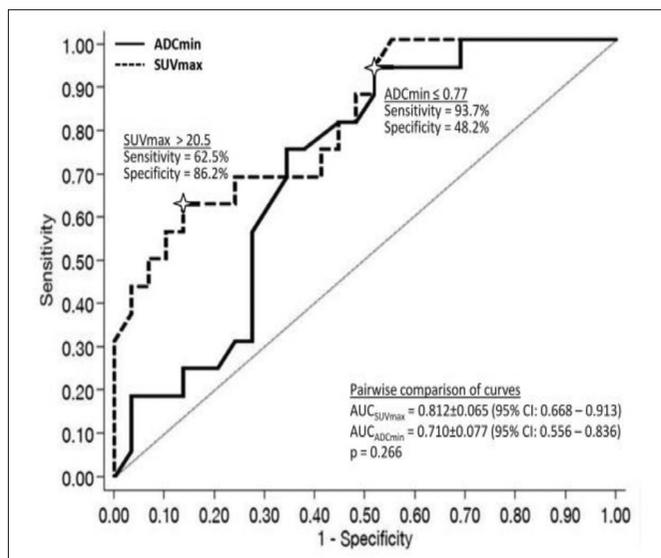
**Results:** The mean ADCmin and SUVmax were  $0.72 \pm 0.22$  and  $16.54 \pm 8.73$ , respectively. In univariate analysis, while the potential factors associated with ADCmin were age, myometrial invasion (MI), and lymphovascular space involvement (LVSI); the potential factors associated with SUVmax 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  $\leq 0.77$  [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), respec-

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
<b>Age</b>					
ADC <sub>min</sub>	-0.405	0.006	-0.105	-0.361 to 0.152	0.416
SUV <sub>max</sub>	0.340	0.022	0.136	0.122 to 0.394	0.293
<b>Stage</b>					
ADC <sub>min</sub>	-0.257	0.088	-	-	-
SUV <sub>max</sub>	0.436	0.003	2.479	2.217 to 3.176	0.721
<b>Non-endometrioid histology</b>					
ADC <sub>min</sub>	103.5	0.051	-	-	-
SUV <sub>max</sub>	129.0	0.209	-	-	-
<b>Grade</b>					
ADC <sub>min</sub>	-0.224	0.139	-	-	-
SUV <sub>max</sub>	0.272	0.071	-	-	-
<b>Tumor size</b>					
ADC <sub>min</sub>	-0.230	0.128	-	-	-
SUV <sub>max</sub>	0.488	0.001	1.269	-0.226 to 2.765	0.094
<b>Deep myoinvasion</b>					
ADC <sub>min</sub>	134.5	0.021	9.457	2.693 to 16.221	0.007
SUV <sub>max</sub>	87.0	0.001	8.494	1.178 to 15.810	0.024
<b>Lymphovascular space invasion</b>					
ADC <sub>min</sub>	110.5	0.015	2.758	-3.254 to 8.769	0.360
SUV <sub>max</sub>	101.0	0.007	2.056	-4.515 to 8.628	0.530
<b>Cervical invasion</b>					
ADC <sub>min</sub>	193.0	0.556	-	-	-
SUV <sub>max</sub>	153.5	0.119	-	-	-
<b>Adnexal invasion</b>					
ADC <sub>min</sub>	108.5	0.776	-	-	-
SUV <sub>max</sub>	55.5	0.040	-	-	-
<b>Lymph node metastasis</b>					
ADC <sub>min</sub>	109.0	0.247	-	-	-
SUV <sub>max</sub>	84.0	0.057	-	-	-
<b>No. of metastatic lymph nodes</b>					
ADC <sub>min</sub>	-0.171	0.262	-	-	-
SUV <sub>max</sub>	0.295	0.049	0.502	-0.868 to 1.871	0.463
<b>Recurrence</b>					
ADC <sub>min</sub>	90.5	0.376	-	-	-
SUV <sub>max</sub>	87.0	0.316	-	-	-
<b>Survival</b>					
ADC <sub>min</sub>	41.0	0.392	-	-	-
SUV <sub>max</sub>	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: confidential interval  
 Boldface indicates statistical significance ( $p < 0.05$ ).



**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**

tively; 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



**Figure 1. Postpartum hemorrhage rates in maternal mortality cases between 2012-2015**

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 pruritus is one of the most common cause of admission to the gynecology outpatient department. The most common cause of acute onset vulvar pruritus is infection whereas pathological examination by biopsy is necessary for chronic vulvar pruritus.

**Material and Methods:** The pathology results of 188 patients admitted to our hospital's gynecology outpatient clinic with chronic vulvar pruritus 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 pruritus. Pathologic analyses from the biopsy specimen, in patients with non-infectious chronic vulvar pruritus, helps early diagnosis and treatment for premalignant vulvar lesions.

**Keywords:** Chronic vulvar pruritis, vulva biopsy

[PP-269]

## Rudimentary horn pregnancy: Diagnosis and treatment

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**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/m<sup>2</sup>). 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

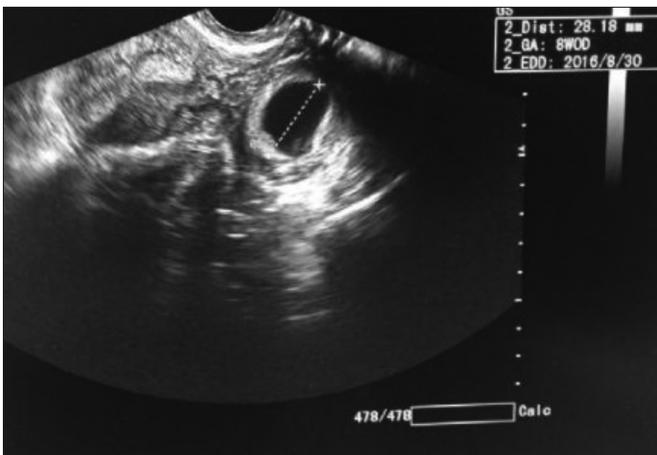


Figure 2. Ultrasound image of rudimentary horn pregnancy

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. Tsafirir 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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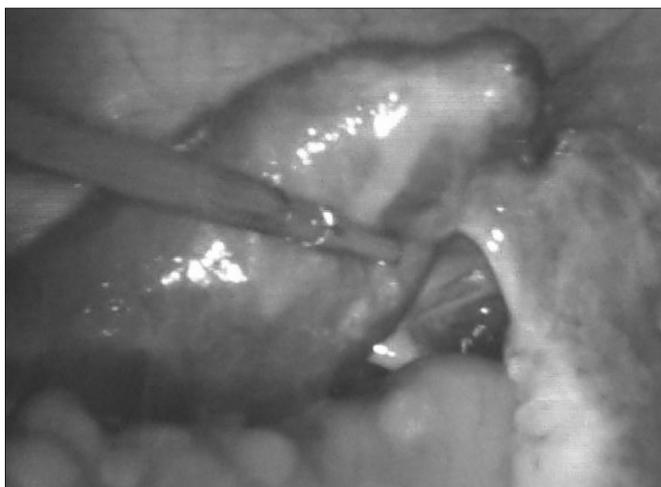
**Background:** Ectopic pregnancy remains to be a significant cause of maternal morbidity,

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 βHCG 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 >= 3mm (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 µmol/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 µmol/L) and 8 patient were mild ICP (<40 µmol/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  $\geq 300$  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, tubes 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 2<sup>nd</sup> 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, synechia, 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 led to bleeding.

**Case:** A 23-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 an 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. Amniotic 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 membranes were intact. In her history 28<sup>th</sup> and 32<sup>nd</sup> 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 3<sup>rd</sup> 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.

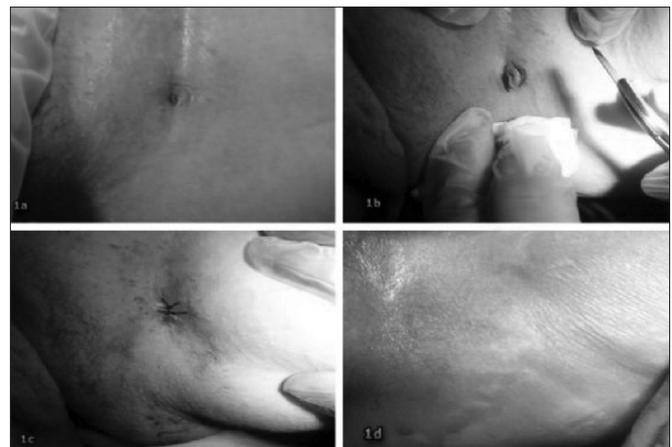
**Case Presentation:** Fifty-five years old, parity five woman admitted to our clinic for mesh exposure at left thigh incision area. She had transobturator tape replacement surgery for SUI three years ago in her medical history. She had no any other medical condition. After physical examination we saw 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<sup>6</sup>. 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 3<sup>rd</sup> and 5<sup>th</sup> 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  $28.84 \pm 3.62$  and  $28 \pm 4.67$ , 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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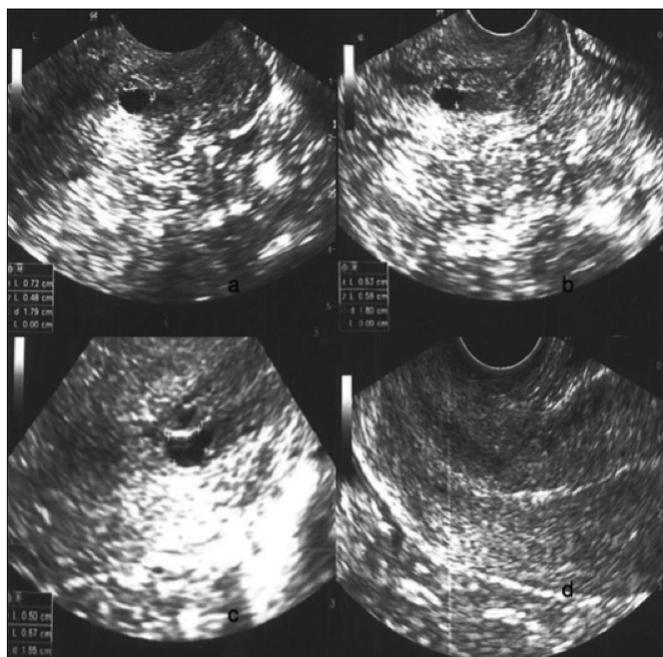
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**Introduction:** Cervical pregnancy, which the pregnancy implants in the lining of the endocervical canal, the incidence is approximately 1/9000 deliveries. It is a rare form of ectopic pregnancy accounts for less than 1% of ectopic pregnancies. Cervical 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.  $\beta$ -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,  $\beta$ -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/m<sup>2</sup>) was administered via intramuscular injection. On the fourth day of the treatment,  $\beta$ -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,  $\beta$ -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  $\beta$ -hCG level was <1.20 mIU/mL and she had mild vaginal bleeding



**Figure 1. a: Methotrexate 1. day b: Methotrexate 4. day c: Methotrexate 7. day d: 4 weeks after the methotrexate regimen**

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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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 they 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 holoprochencephaly 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

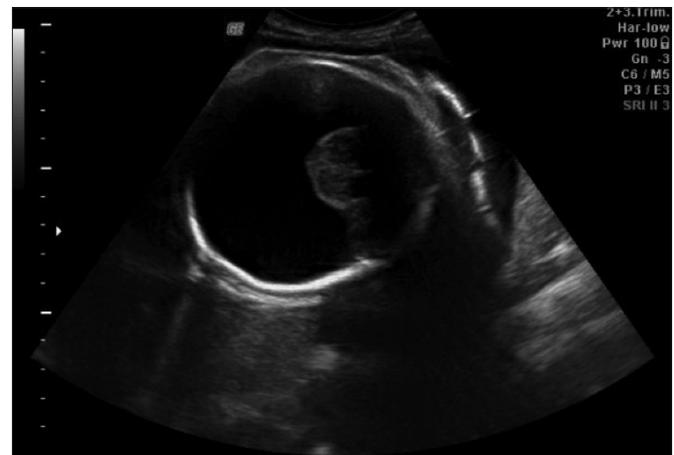


Figure 1. 2D Ultrasongraphy photo



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

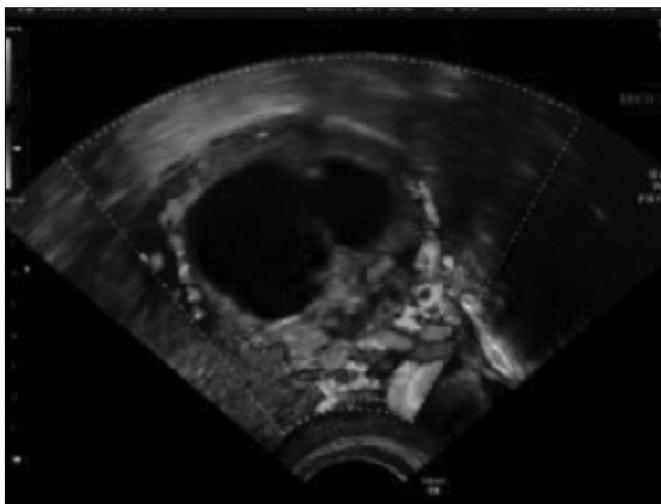


Figure 1. Colour doppler sonography of ectopic pregnancy



Figure 2. Left cornual ectopic pregnancy

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

[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 fimbrias 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

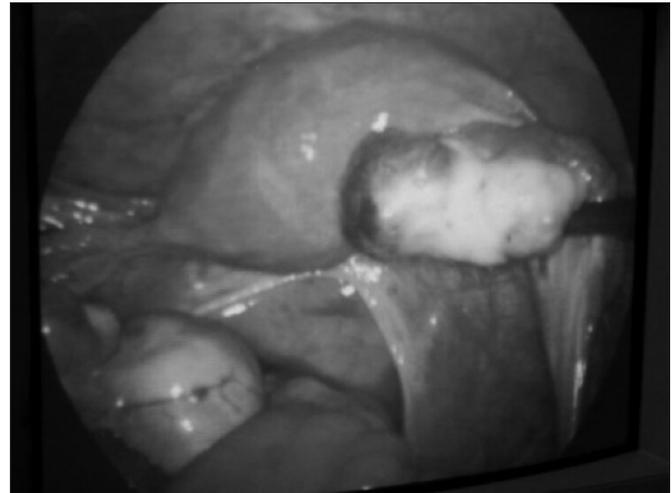


Figure 1. 2D Ultrasography photo

ovary. Left ovary seemed to be normal. Beta-hcg valuse 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 policlinics 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 an 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 an incompletely 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 suspicion 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 to predict 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  $29.9 \pm 4.7$  years and in group 2 were  $27.2 \pm 4.2$  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, antiprogestone (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 pathophysiology. 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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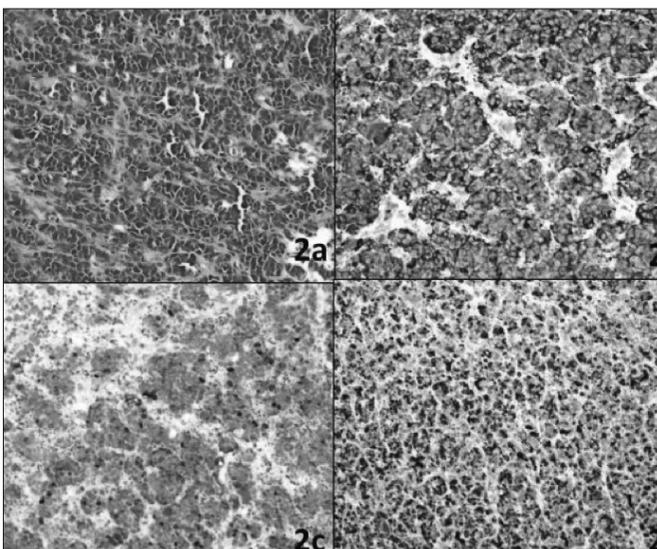
**Introduction:** Metastatic ovary tumors are 10-30% of all ovary tumors. These, primary focus is frequently colon, appendix, breast and pancreas. Lung cancer metastasis to ovary is rarely in which that 0,3-0,4% for metastatic ovary tumors. This presentation prepared cause of small-cell lung cancer (SCLC) 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 heterogen solid mass (150x100x85 mm) which is maybe the left adnexial-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 pulmoner artery, esophagus, arcus 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 taked out with bronchoscopy and detected SCLC at pathology specimen. The patient taked 3 cure Etoposide and Cisplatin for chemotherapy at medical oncology clinic. After chemoteraphy, left-adnex originated mass detected, 200x135 mm in which lobule heterogen-contrasted. Different mass (160x125x245 mm) lying to near upper of vesica from left renal hilus detected, the mass retented 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 (HEx200) (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, salpingoophorectomy, paraaortic lymphadenectomi, omentectomy and abdominal surface. Neuroendocrinal SCLC detected in the paraaortic lymphnode 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 womans 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 thoracal mass by imagine 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, vagi-



Figure 1. Ultrasound image of retroperitoneal hematoma

na, and vulva which have rich vascular supplies and they have risk 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

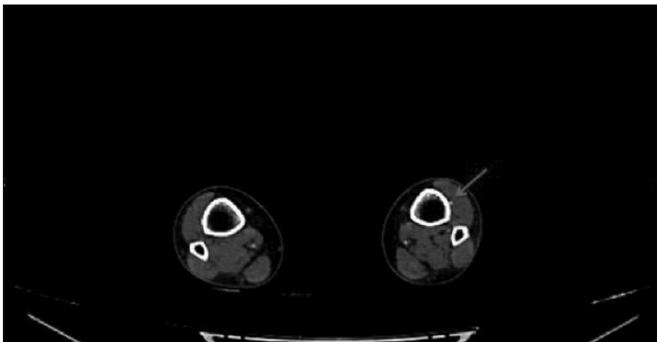
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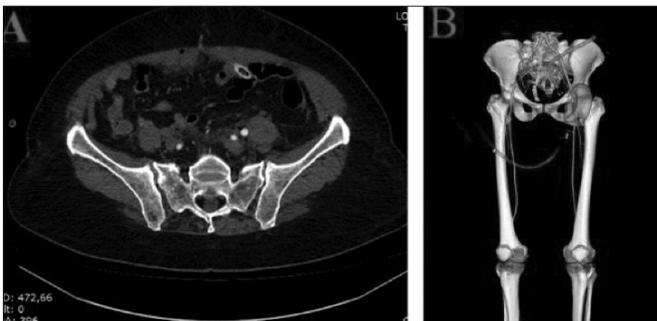
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**Introduction:** Acute arterial occlusion is suddenly interrupted the blood flowing to a extremity or organ. Despite rarely, this condition could be cause of organ loss even death. Acute arterial occlusion presentation is prepared for highlight the 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



**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)

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 2<sup>nd</sup> 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 8<sup>th</sup> 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

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. Hemovac 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  $\beta$  - 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 patient was referred to our high risk pregnancy unit with suspected skeletal dysplasia at 17 weeks of gestation. Nonconsanguineous 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 analysis 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 thematerial sent to pathological evaluate. In histopathologic sections, under stratified squamous epithelium, surface in a fibrovascular stroma vas-



Figure 1. Macroscopic appearance of polyp

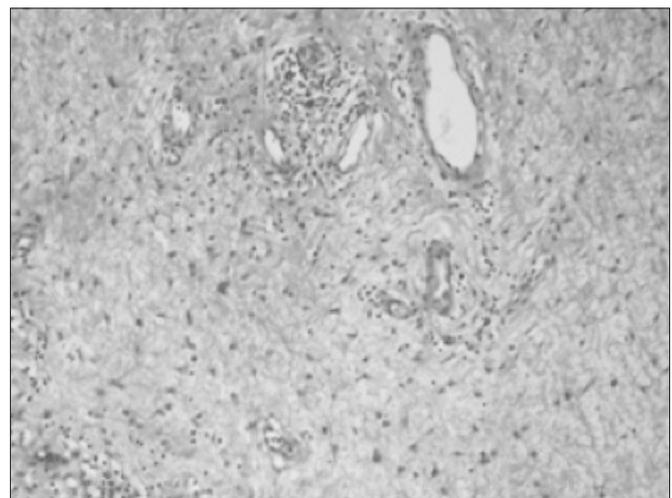


Figure 2. Stellate and multinucleate stromal cells that has a fibrovascular core with small vascular structures

culer lesion consisting of stellate cells and multinuclearstromal 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 dimentions. Surgical excision provides comfort, convenience, hygiene to patient in daily activities in addition it is impotent that histopathological examination should be ruled out of malignancy.

**Keywords:** Vulva, fibroepithelial polyp, akrokordon, skintag

[PP-314]

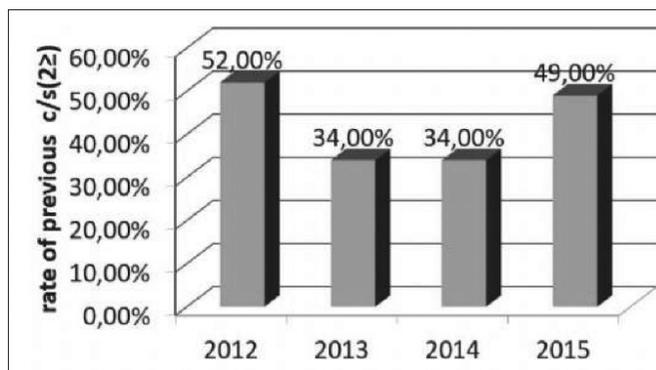
## Distribution percentage of previous C/S as an indication for the following caeserean section in a multidisciplinary hospital in İstanbul

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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 sectio is an operation carrying the risks and complications of many other major surgeries and has unapproved longterm 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 caesareean 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 fouryear 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 are 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 fouryear 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:** Caeserean section, rate

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