

What is your diagnosis?

A twenty-three year old woman, gravida 2, parity 1, applied to her primary gynaecologist with the complaint of chronic right lower quadrant pain. She had a history of one normal vaginal birth 4 years ago and dilatation & curettage 3 months ago for an unintended pregnancy. Her last sexual intercourse was 4 months ago. Transvaginal sonography revealed a 6 cm right adnexal mass that appeared to be an ovarian malignancy and she was referred to our clinic. Upon physical examination, she had minimal tenderness

on the right lower quadrant but there were no defence or rebound. Transvaginal sonography that was performed in our department revealed a 53x62 mm thick walled cystic mass with papillary projections (Figure 1). There was minimal free fluid in the pouch of Douglas. Magnetic resonance image (MRI) supported the diagnosis of ovarian tumour with high T2 signal intensity (Figure 2). CA-125, AFP, LDH, CA-19-9 levels were within normal ranges; only β -hCG level was 38 mIU/mL.

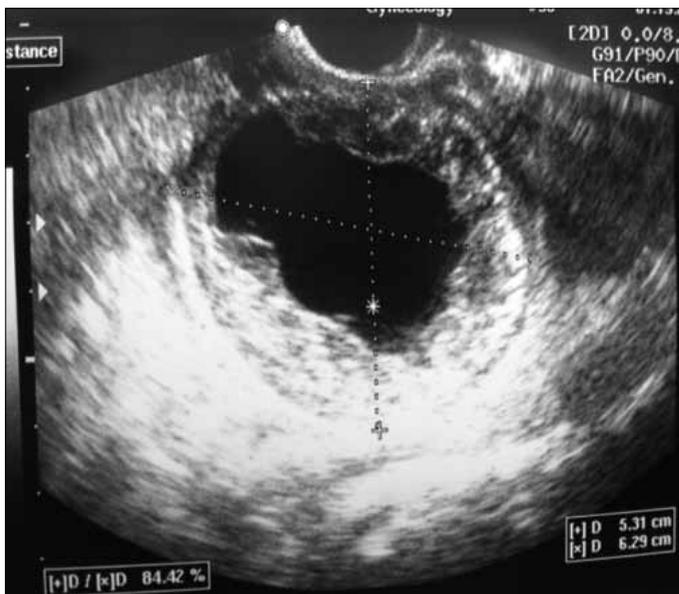


Figure 1. The sonographic view of the right adnexal mass.

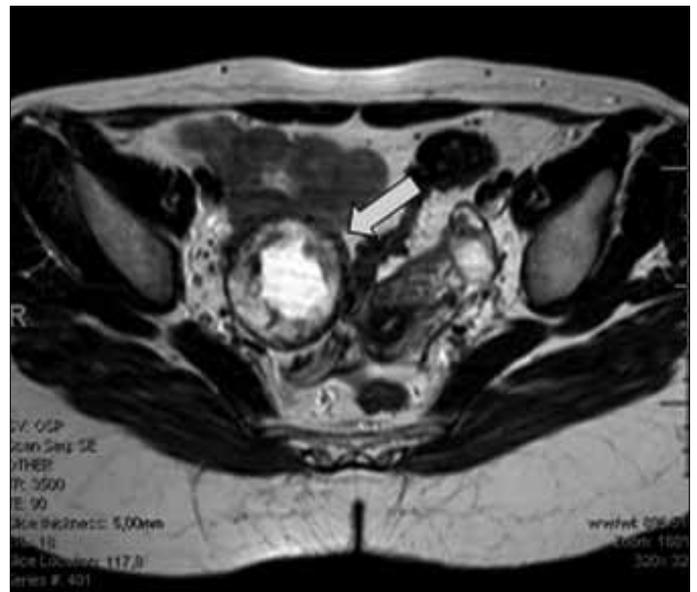


Figure 2. Arrow shows the magnetic resonance imaging of the adnexal mass.



Answer

Chronic ectopic pregnancy is a rare type of ectopic pregnancy. Its true incidence is not really known, but in some studies it is reported to account for 6-20% of all ectopic pregnancies (1-3). It results from minor bleeding from the tubal pregnancy or abortion. The mass may turn into a haematocoele that contains trophoblastic tissue. Mostly, adhesions may occur around due to the inflammatory response (2, 3). Negative β -hCG level does not rule out chronic ectopic pregnancy because β -hCG may be negative or near normal (4). Clinical symptoms are not reliable because there is no specific symptom; abdominal pain is mostly chronic or mild. Thus, preoperative diagnosis is difficult.

The imaging techniques generally do not help to diagnose because the appearance can overlap with acute pelvic inflammatory disease, pelvic abscess, vascular tumours, and endometriosis (5). As described by Su et al. (6), the lesion may be a cystic mass with intralesional haematoma and soft tissue components, so it may be misdiagnosed as an ovarian tumour. Also the ensuing inflammatory reaction can incorporate the uterus and may make the margins of the mass indistinct (7). In our case, although other tumour markers were negative, β -hCG level was 38 mIU/mL, her last sexual intercourse was 4 months ago and her menses were regular; therefore, we did not suspect pregnancy. Both the ultrasound and the MRI showed an atypical mass that is cystic and solid and has papillary projections. In the MRI, the mass has high T2 intensity. With all of these findings, the possible preoperative diagnosis was germ cell tumour; therefore, we performed a laparotomy. During the operation, it appeared that the mass had originated from the right fallopian tube and there was no adhesion around the mass. There was minimal free fluid in the pouch of Douglas, and the gross view of the lesion did not appear malignant. Also, the frozen section supported the fact that it was benign and contained trophoblastic tissue. This case showed us that this typical sonographic view of a thick-walled cystic mass with a flower-leaf pattern around it may be an indication of a tubal pregnancy, especially if the ovary can be seen separately. Harada et al. also showed a similar image

in their case (8). Additionally, the β -hCG level may help to differentiate this diagnosis if it is positive.

As a conclusion, chronic ectopic pregnancy is a rare pathology and may mimic ovarian cancer. The clinician must also consider this diagnosis if the image of the lesion is similar to our case and should also use minimally invasive treatment to reach the correct diagnosis.

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