

**Mature Cystic Teratoma Of The Ovary Coexisting With Tubal Ectopic Pregnancy:  
A Case Report****Ovaryan Matür Kistik Teratom Ve Beraberinde Tubal Ektopik Gebelik: Olgu Sunumu**

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**ABSTRACT**

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 ipsilateral 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 coexistence of different gynecologic pathologies in the same patient and clinical importance of an accurate diagnostic evaluation.

**Keywords:** Dermoid cyst, ectopic pregnancy, laparoscopy, ovary.

**ÖZ**

Matür kistik teratoma (dermoid kist) ve ektopik gebelik, reproduktif dönemdeki kadınlarda sık görülen patolojiler olmakla birlikte, bu iki hastalığın aynı hastada görülmesi nadir rastlanan bir klinik durumdur. Bu olgu sunumunda, pelvik ağrı ve minimal vajinal kanama ile başvuran 26 yaşında nulligravid bir hastayı bildirmekteyiz. Detaylı jinekolojik değerlendirme ve görüntüleme tetkikleri sonucunda, aynı taraftaki adneksiyal bölgede tubal ektopik gebelik ve ovaryan dermoid kist tespit edildi. Ardından uygulanan laparoskopik cerrahide sol unruptüre 2x2 cm tubal ektopik gebelik ve 9x7 cm ovaryan dermoid kist olduğu gözlemlendi. Salpingostomi ve total kistektomi yapıldı. Patolojik inceleme, ektopik gebelik ve dermoid kist tanıları doğruladı. Cerrahi sonrası dönemde sorun saptanmadı. Bu vaka sunumunda, aynı hastada farklı jinekolojik patolojilerin bir arada bulunabileceğinin hatırlanması gerekliliği ve eksiksiz bir diagnostik incelemenin önemi vurgulanmaktadır.

**Anahtar Kelimeler:** Dermoid kist, ektopik gebelik, laparoskopi, over.

**INTRODUCTION**

Mature cystic teratoma (dermoid cyst) is the most common ovarian germ cell-derived neoplasm, accounting for more than one-half of all ovarian tumors in women of reproductive age (1). These benign neoplasms are often asymptomatic until they reach a considerable size and they may cause torsion, rupture or infection. They are usually detected during sonographic pelvic examination or surgery performed for other reasons (2). Ectopic pregnancy is also a common cause of morbidity among women of reproductive age group. On the other hand, mature cystic teratoma coexisting with ectopic pregnancy is an unusual case. In current report, we presented a case of mature cystic teratoma of the ovary combined with ipsilateral tubal ectopic pregnancy.

**Case**

A 26-year-old, para 0, gravida 0 woman was admitted to our hospital with a history of pelvic pain and minimal vaginal bleeding for 5 days following 6 weeks of amenorrhoea. Past menstrual, medical, surgical and family history were unremarkable. Her general condition was good and vital signs were normal. Clinical examination revealed soft abdomen with mild tenderness in the left iliac fossa. Gynecological examination showed an anteverted uterus with normal volume, and on the left side a mobile mass approximately 8 cms in diameter was palpable. Serum  $\beta$ -human chorionic gonadotropin (HCG) value was 1673 mIU/ml. Transvaginal ultrasonography revealed empty uterine cavity, an ectopic gestational sac with yolk sac in the left fallopian tube, and left

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hyperechogenic complex adnexal mass of 9x7 cm in diameter was also noted. No free fluid was noted in the pouch of Douglas. Further evaluation with pelvic magnetic resonance imaging (MRI) showed an ovarian cystic mass with an enhancing solid portion and fat compatible with left ovarian mature cystic teratoma (Figure 1). Other serum tumor markers ( $\alpha$ -fetoprotein, CA-125, CA 15-3, CA 19-9, carcinoembryonic antigen) and routine haematological and biochemical examinations were within normal limits. Based on these findings, laparoscopic surgery was performed for both diagnostic and treatment purposes. Intraoperatively, the uterus and right adnexa appeared normal; unruptured left tubal pregnancy measuring 2x2 cm in the ampullary region and ipsilateral ovarian mature cystic teratoma measuring 9x7 cm were found. Left salpingostomy was done. The ovarian cyst was then enucleated and totally excised leaving behind a significant amount of normal ovarian tissue. The tumour was placed in an endobag and removed (Figure 2).

Fatty tissue and hair were found, characteristics of teratoma. The content of the fallopian tube and excised ovarian cyst were sent for histopathological evaluation. Histopathologically, the diagnosis of ovarian mature cystic teratoma and coexistence of tubal ectopic pregnancy was confirmed. Postoperative recovery was uncomplicated and the patient was discharged on the second post-operative day. Serum  $\beta$ -HCG levels gradually decreased to almost undetectable levels by 20 days.

## DISCUSSION

Dermoid cysts can be detected as cystic or solid masses with areas of fat and calcification at ultrasound examination (3). On the other hand, when sonographic findings are indeterminate, MRI is potentially useful (4). With MRI, the presence of characteristic intensity similar to that of subcutaneous fat, chemical shift artifacts and fat-fluid levels are useful findings in the diagnosis of mature cystic teratomas (5).

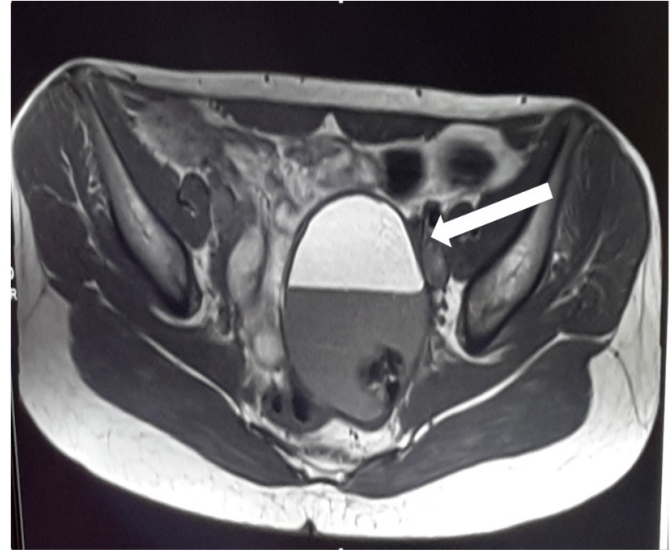
Transvaginal ultrasonography is the initial modality of choice to diagnose ectopic pregnancy. The incidence of ectopic pregnancies has increased in recent years. This is particularly in relation to awareness of the condition and early presentation, as they are significantly more likely to present at an earlier gestation, with lower serum  $\beta$ -HCG levels. Laparoscopy is one of the most common procedure for gynecologic surgery among women of reproductive age, in whom it is desirable to preserve fertility and less adhesion formation. It presents less bleeding and short hospital stay, offering a quick recovery. The majority of ectopic pregnancies and dermoid cysts can be managed by laparoscopic surgery (6,7). Therefore in our case, laparoscopic ovarian cystectomy with ovarian preservation and salpingostomy were performed.

In literature, there are few reports about the simultaneous coexistence of the are ovarian mature cystic teratoma and ectopic tubal pregnancy (2,8,9). Although dermoid cyst is a common ovarian tumour, the coexistence of this neoplasm with ectopic pregnancy is rare. In patients with coexistence of different gynecologic pathologies as seen in the reported case, presents a challenge to the clinician and importance of careful diagnostic evaluation is manifested. A detailed preoperative transvaginal ultrasound examination is a helpful tool for assessing adnexal lesions. In addition, a correct diagnosis of adnexal masses is of critical importance in deciding on the type of operation to treat these lesions. Magnetic Resonance Imaging is considered to be an excellent modality for the diagnosis of gynecologic disorders presenting with

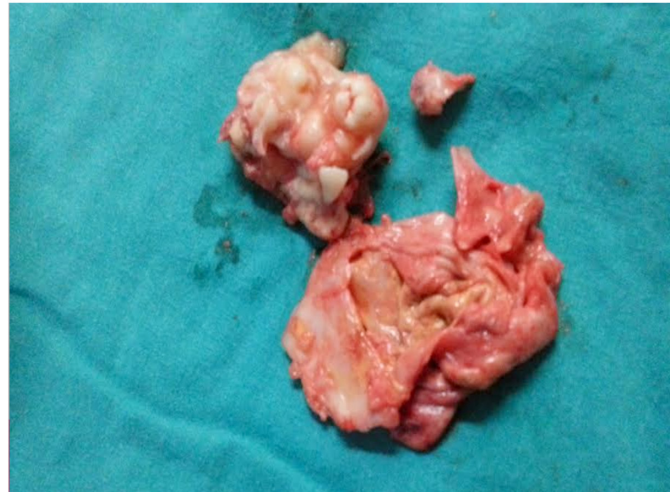
abdominal mass and pain (10). If the additional information is needed, it may be superior to another diagnostic tools.

In conclusion, the case presented here underlines the importance of considering the simultaneous coexistence of different gynecologic pathologies in the same patient. Since accurate clinical assessment and adequate imaging of all pelvic organs form a critical part in the decision of treatment modality in these cases, awareness of the possibility of this coexistence is very important.

**Figure 1:** Magnetic resonance image of the pelvis showing a cystic structure containing fat (indicated by arrow).



**Figure 2:** Dermoid cyst removed by laparoscopy



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