



Pregnancy with Bilateral Dermoid Cyst and Unilateral Ovarian Torsion: a Case Report

Bilateral Dermoid Kistli ve Unilateral Ovaryum Torsiyonlu Gebelik: Bir Olgu Sunumu

Sibel Özler¹, Efser Öztaş¹, Ali Özgür Ersoy¹, Ayşe Kırbaş¹, Dilek Uygur Şahin¹, Nuri Danışman¹

¹Department of Perinatology in Zekai Tahir Burak Education and Research Hospital of Women and Children, ANKARA

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ABSTRACT

Dermoid cyst (Mature cystic teratoma), the most common type of primordial germ cell ovarian tumors is usually benign and asymptomatic. It can be malignant for only 5 per cent. Giant ones can be symptomatic. Torsion is the most common complication. Ovarian (adnexal) torsion is defined that is twisting of ovarian(adnexal) mass around itself and compression of its vascular pedicle. Unless it's diagnosed and treated quickly, ovarian torsion can give a way to haemorrhagic infarct and necrosis of that ovary. Torsion occurs and progresses in a few hours. The most important entities are early diagnosis and early treatment. Clinical signs are similar in pregnant and non-pregnant cases. Approximately 20 per cent can give symptoms during pregnancy. It can occur in any trimester, but especially in first trimester. The patient complains about severe lower abdominal and pelvic pain, nausea and vomiting. Ultrasound and Doppler scan are first choices to make a diagnosis. For an exact assessment and treatment, it is warranted to detorsion of that adnex-ovary, visualize and observe its vitality during the operation. Here we are presenting a case that is pregnant in ten weeks' gestation with bilateral dermoid cyst and unilateral ovarian torsion.

Key words: Dermoid cyst, ovarian torsion during pregnancy, transvaginal ultrasound.

ÖZET

Dermoid kist (olgun kistik teratom), primordiyal germ hücre yumurtalık tümörlerinin en yaygını olup genellikle iyi huylu ve asemptomatiktir. Sadece %5'i kötü huylu olabilir. Büyük olanlar semptomatik olabilir. Torsiyon en yaygın komplikasyondur. Ovaryum (adneksal) torsiyonu, ovaryumun kendi etrafında dönmesi ve vasküler sapçık basıncı ile tanımlanabilir. Tanı konulmaz ve hızlı şekilde tedavi edilmezse, ovaryum torsiyonu, kan kaybetme enfaktüse ve ovaryumun nekrozuna sebep olabilir. Torsiyon sadece birkaç saat içinde meydana gelir ve gelişim gösterir. En önemli özelliği erken tanı ve erken tedavidir. Klinik belirtiler hamilelikte ve hamilelik dışı vakalarda benzerdir. Yaklaşık %20'si hamilelik sırasında semptomlar verebilir. Herhangi bir trimesterde meydana gelebilir, fakat genelde özellikle ilk trimesterde rastlanır. Hastalar, şiddetli alt dominal ve pelvis ağrısı, bulantı ve kusmadan şikayet ederler. Ultrason ve Doppler taraması tanı koymak için tercih edilebilir. Kesin tanı ve tedavi için, adneks-ovaryumun torsiyonunun düzeltilmesi, görüntülenmesi ve ameliyat sırasında canlılığının gözlenmesi gereklidir. Burada biz, bilateral dermoid kist ve unilateral ovaryum torsiyonunun gözleendiği 10 haftalık bir gebelik vakası sunuyoruz.

Anahtar kelimeler: Dermoid kist, hamilelik sırasında ovaryum torsiyonu, transvajinal ultrason

INTRODUCTION

The vast majority of adnexal masses during pregnancy are benign. They are usually simple anechoic cysts and smaller than 5 cm in mean diameter. The most common type of ovarian cyst is corpus luteum cyst. 70 per cent of adnexal masses during pregnancy get well spontaneously in first trimester or early second trimester. Persisting cysts are often bigger than 5 cm in diameter and many of them are dermoid cysts³. 20-40 per cent of ovarian neoplasias during pregnancy are dermoid cysts⁴. These are often asymptomatic and are diagnosed incidentally during routine antenatal survey. The most common symptom is torsion. Here we are presenting a case that is pregnant in ten weeks' gestation with bilateral dermoid cyst and unilateral ovarian torsion, successfully treated with laparotomic operation.

CASE

18 years old, primigravida patient says she had complaints about pelvic pain and underwent gynecological follow-up before pregnancy, there were cystic masses including some hyperechoic areas about 102*80 mm in left ovary and 74*68 mm in right ovary indicating bilateral dermoid cysts. During preparational procedures for gynecologic operation, patient received information of her pregnancy. The patient applied our clinic for antenatal survey and underwent ultrasonographic examination and were detected as she had a pregnancy of 8 weeks' gestation (Crown-Rump Length:16mm) and bilateral cystic ovarian mass consistent in dimension with her prior ultrasonographic examination and she had a corpus luteum in left ovary that is approximately 30 mm in diameter. Bilateral ovarian vascularization

was detected as normally with Doppler examination and there was no clinical sign to consider about torsion. Expectant management were offered to the patient. Two weeks after this, the patient applied to our emergency room with acute abdominal pain. Abdominal sensitivity in right lower quadrant were arisen and there were defensive tenderness and rebound tenderness in her physical examination. Ultrasonographic examination showed a pregnancy of 10 weeks' gestation (Crown-Rump Length: 40 mm), bilocular cystic mass in right ovary about 80*78 mm in dimension, cystic mass including hyperechoic areas in left ovary about 62*55 mm in dimension. Vascularization in right ovary could not be seen with Doppler examination. Decision of laparotomy were made emergently. During abdominal exploration, right ovarian cystic mass was about 7-8 cm in diameter, rotated around the right mesovarium three times, seemed to be edematous and purple-colored due to compression of vascular bed (Figure-1). Left ovarian cystic mass was bilocular and about 8-10 cm in diameter (Figure-2). Right ovarian mass was detorsioned and dermoid cyst (about 7 cm in diameter) was excised with its capsule and ovarian colorization returned to normal (Figure-3). Left ovarian mass was excised in the same way. Maximum effort was carried out in order to leave the corpus luteum and ovarian tissue as well. After the operation, 17 hydroxyprogesterone caproat was administered as intramuscular injection and micronized progesterone capsule 200 mg. orally three times a day was offered. The patient was observed during three days postoperatively and no pathologic sign was recorded. Her pregnancy was followed up without any pathologic sign for three months after the operation.



Figure 1. Right ovarian torsion have been times and purple colors (white arrow), lobule dermoid cyst in the left ovary (blue arrow).



Figure 2. Lobule dermoid cyst.



Figure 3. After bilateral ovarian cystectomy.

DISCUSSION

The vast majority of adnexal masses during pregnancy are benign. Torsion risk is more than any other times during pregnancy. The incidence of torsion during pregnancy is uncertain. In a retrospective study, lasting 5 years, including 4274 pregnant patients with adnexal mass, it was declared that 7 patients (%0,2) who underwent torsion[5]. The incidence of torsion in pregnant patients with ovarian cyst persisting during pregnancy was found as 15 per cent⁵. Adnexal

torsion is more frequently during 10-17 weeks' gestation, but it can also be seen in subsequent weeks and any time after child-birth. Ovarian masses sized to 6-8 cm in diameter have much more risk rather than ones sized to 10-20 cm in diameter during pregnancy period^{6,7}. No complication in dermoid cysts lesser than 6 cm in diameter, during pregnancy and parturition is anticipated⁸. Surgical excision is offered for dermoid cysts larger than 6 cm in diameter and persisting about 16 weeks during pregnancy⁹.

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Yazışma Adresi / Address for Correspondence:

Dr. Sibel Özler
Zekai Tahir Burak Education and Research Hospital of Women and Children
Department of Perinatology
ANKARA
E-mail: sibelozlermail.com

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