

# Torsion of a Normal Ovary and Torsion of a Ovarian Tumor Two Different Unusual Cases

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Adnexal torsion is uncommon cause of severe abdominal pain in adolescents and postmenopausal women. We present two cases of ovarian torsion with two different etiologies in a 17-year-old adolescent girl with torsion of a normal ovary and 64 year-old postmenopausal woman with torsion of ovarian tumor. Most cases of ovarian torsion are due to some underlying ovarian pathology that causes ovary to twist around its vascular pedicle. In the first case, we present torsion of a normal ovary in an adolescent girl.

Due to invasion or adherence to adjacent pelvic tissues, malignant ovarian tumors carry only 2% risk of torsion. In the second case, we report torsion of micropapillary type serous borderline ovarian tumor. It is important to keep ovarian torsion in mind in differential diagnosis in young adolescent girls and postmenopausal women with acute abdominal pain. Ultrasound with Doppler imaging is the main diagnostic tool with detailed history and physical exam. Once adnexal torsion is diagnosed, management is surgical. Further researches are necessary to develop methods of determining the viability of the ovary.

**Key Words:** Ovary, Torsion, Ultrasonography

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## Introduction

Torsion of ovary is a gynecological emergency that requires prompt diagnosis and surgical treatment. Although ovarian torsion is generally accepted as uncommon, studies propose that adnexal torsion is the 5th most common gynecologic emergency, representing 2%-3% of acute surgical emergencies.<sup>1</sup> Most cases of ovarian torsion are due to some underlying ovarian pathology that causes ovary to twist around its vascular pedicle. If the rotation is complete and prolonged, venous and arterial thromboses occur, ultimately causing adnexal infarction.<sup>2</sup> Clinically, the detection of an ovarian mass accompanied by abdominal pain which is located in lower abdomen of the affected side leads to suspicion of ovarian torsion. Ultrasonography with Doppler imaging is important in making the correct diagnosis of pain. 93% of patients with ovarian torsion have abnormal sonographic findings.<sup>3</sup> Once adnexal torsion is diagnosed, management is surgical. New

advances in conservative surgical management have made early diagnosis very important for ovarian salvage.

## Case 1

A 64 year old postmenopausal woman referred to our hospital with abdomino-pelvic mass and severe pain. Nausea and anorexia were present. On abdominal examination, a large mass was visible and palpable extending from the pelvis to above the umbilicus. Pelvic examination revealed the mass which was firm, tender and immobile.

A pelvic ultrasound was performed, showing 25×20 cm complex solid-cystic mass occupying nearly all abdomen (Figure 1). Color Doppler confirmed no flow in or periphery of the mass. As her clinical condition worsened, emergent laparotomy was performed. On laparotomy, adnexal mass was smooth, cystic measuring 25×25 cm with two times torsion around its pedicle (Figure 2). Total abdominal hysterectomy and bilateral salpingo-oophorectomy was performed. As surgery was not being performed in elective condition, we couldn't have performed frozen section. There was, no adhesion or any metastatic areas are visible macroscopically in the pelvis. We performed hysterectomy and bilateral adnexectomy. The histopathological diagnosis was micropapillary type serous borderline tumor. There was non-invasive implant on the left ovary. Peritoneal washing was positive. After pathologic result was obtained, the patient was recalled for proper staging.

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adnexal torsion in regard to etiology. Detection of an ovarian mass accompanied by abdominal pain which is located in lower abdomen of the affected side should lead to suspicion of ovarian torsion. In most cases, especially in female child and young adolescent girls, adnexal necrosis progresses due to delayed diagnosis, making preservation of the adnexal tissue more difficult.

In conclusion, it is important to keep ovarian torsion in mind in differential diagnosis in young adolescent girls and postmenopausal women with acute abdominal pain. Further research is necessary to develop methods of determining the viability of the ovary.

### Normal Overin ve Over Tümörünün Torsiyonu Over Torsiyonunda İki Farklı Etiyoloji

Adnexial torsion adolesanlarda ve postmenapozal kadınlarda ciddi abdominal ağrının sık olmayan nedenlerinden biridir. Biz 17 yaşında adolesan bir kızda olan normal overin torsiyonu ve 64 yaşında postmenapozdaki bir kadındaki over tümörünün torsiyonunu sunuyoruz. Çoğu over torsiyonu, overe ait bir patolojiye bağlı olarak overin kendi pedünkülü etrafında dönmesi ile oluşur. İlk vakamız, adolesan bir kızda normal bir overin torsiyonudur.

Komşu pelvik dokulara adezyonu ve invazyonu nedeniyle malign over tümörleri sadece %2 torsiyon riski taşır. İkinci vakamız ise mikropapiller tip seroz borderline over tümörünün torsiyonudur. Akut abdominal ağrı ile başvuran adolesanlarda ve postmenapozal kadınlarda over torsiyonu ayırıcı tanıda akla gelmelidir. Doppler ultrasonografi, detaylı anamnez ve fizik muayene tanıda önemlidir. Adnexial torsiyonda tedavi cerrahi-

dir. Overin viabilitesini anlamak için yeni çalışmalara ihtiyaç vardır.

**Anahtar Kelimeler:** Over, Torsion, Ultrasonografi

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