# Chronic Tubal Torsion Mimicking a Tubo-Ovarian Abscess; Case Report

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#### ABSTRACT

Isolated tubal torsion is an uncommon cause of acute abdominal pain with the incidence of about 1/1,500,000 women. Here, we present a 36-year-old patient who was referred to us with the diagnosis of tuboovarian abscess resistant to medical treatment. Although she was hospitalized and was medicated, her complaints did not reduce. Diagnostic laparoscopy was performed, and salpingectomy was performed on account of tubal torsion.

Key words: Acute abdomen, tubal torsion, laparoscopy

#### TUBO-OVARIAN APSESI OLARAK YANLIŞ TEŞHIS EDILEN TUBAL TORSIYON

### ÖZET

İzole tubal torsiyon, nadiren akut batına neden olur ve görülme sıklığı 1/1.500.000 olarak bildirilmiştir. Biz, 36 yaşında, medikal tedaviye dirençli tubo-ovaryen abse tanısıyla kliniğimize refere edilen olguyu sunacağız. Hastaya, hastaneye yatış sonrası medikal tedaviye yanıt alınamaması nedeniyle tanısal laparoskopi planlanmış, işlem sırasında izole tubal torsiyon tanısı konularak, tubada nekroz gelişmiş olması nedeniyle salpenjektomi yapılmıştır.

Anahtar sözcükler: Akut karın, tubal torsiyon, laparoskopi

solated tubal torsion is a rare cause of acute abdomen through gynecologic diseases, and accounts for a very small number of the adnexial torsions with the incidence of about 1/1.500.000 women (1).

In most cases, there is a predisposing factor such as paratubal cysts or anatomical abnormalities such as hydrosalpinx (1). Lower abdominal pain is the most common symptom. Gray scala and Doppler ultrasonography are beneficial at diagnosis (2, 3). Surgical management is mandatory, and laparoscopic detorsion is the gold standard.

## **Case presentation**

a 36-year-old patient complaining of lower abdominal pain radiating to the right groin and pubis was admitted to our clinic. Past history was insignificant except two vaginal deliveries. On physical examination, tenderness on the right lower quadrant was the unique abnormal finding. Gynecologic examination was normal except cervical sensitivity. Laboratory findings were normal other than elevated levels of C-reactive protein (CRP: 6.05 mg/dL). Ultrasonographic examination showed a 50×40

millimeter heterogeneous right adnexal cystic mass giving the impression of tubo-ovarian abscess. Bilateral ovarian blood flow was normal at Doppler ultrasonography. She was hospitalized with the diagnosis of tubo-ovarian abscess, and was medicated with intravenous metronidazole/ceftriaxone for three days; however, there was no amelioration of her complaints. Diagnostic laparoscopy was performed.

A 5×4 cm and necrotic paratubal cystic mass was observed at the right adnexal region. The cystic mass and the right fallopian tube were twisted four times around themselves. Right and the left ovaries were normal. Salpingectomy was performed due to necrotic appearance of surgical material. Appendix was evaluated against concomitant appendicitis, and observed normal. Histologic examination revealed a 5×4 cm, necrotic paratubal cyst. The fallopian tube wall was edematous and congested (Figure 1). She was discharged at the 2nd postoperative day with oral antibiotherapy.



**Figure 1**. Appearance of salpinx and paratubal cyst before salpingectomy. Fallopian tube twisted four times around itself.

## Discussion

Isolated tubal torsion is a rare cause of acute abdomen, and typically diagnosed during surgery. In order to diagnose tubal torsion; ovarian torsion, ruptured ovarian cyst, salpingitis, tubo-ovarian abscess, degenerated leiomyoma should be kept in mind in differential diagnosis. The etiology is unknown (4, 5). Typical presentation is lower abdominal pain frequently accompanied with nausea, and vomiting (6–8) concomitant with tenderness at the lower abdomen. Abdominal guarding and rebound may develop in advanced cases. Power Doppler and pulse Doppler assessment of the ovarian blood flow has been recommended as helpful methods in determination of the blood supply of the cyst and the ovaries. Absence of reverse end diastolic flow is excitant for twisting (3). Laboratory findings such as leucocytosis, and elevated levels of C-reactive protein should be contributory at definitive diagnosis (6–8).

In our case, lower abdominal pain concomitant with tenderness in the right side of lower abdomen radiating to right groin was the main clinical presentation. Abdominal guarding was existent in the progression of the disease. Sonographic examination supported us both at differential and definitive diagnosis. Right paratubal cyst concomitant with regular ovarian blood flow lead us away from the diagnosis of ovarian torsion. Physicians have to be careful in terms of tubal torsion when ovarian blood flow was demonstrated by Doppler ultrasonography. After three days of medication with antibiotics, lack of improvement in clinical status led us to perform diagnostic laparoscopy.

## Conclusion

Acute abdomen is rarely dependent on isolated fallopian tube torsion. It is usually misdiagnosed as ovarian torsion, pelvic abscess, and confused with the other causes of acute abdomen. If bilateral ovarian blood flows appear normally in the presence of paratubal cyst, Doppler ultrasonography may be predictive at the diagnosis of tubal torsion, and allow the clinician to suspect.

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