

İzole Tubal Torsiyon: Vaka Sunumu

Tubal Torsion: A Case report

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ABSTRACT: Objective: We present a case of isolated tubal torsion diagnosed preoperatively and managed promptly at the same session.

Case: A 43-year-old woman complaining of sudden onset of pain in the suprapubic area which had started 8 hours ago, along with nausea and vomiting, presented to emergency room. In the transvaginal sonography, an 8 cm anechoic cyst with thick septations and lobulations had been found. Blood flow has not been seen around the cyst in doppler examination. Laparoscopic right salpinxectomy has been performed. The patient has been discharged on the second day after the operation without any complication.

Conclusion: Tubal torsion should always be kept in mind in a woman presenting with acute pelvic pain, so that the early diagnosis and fertility sparing interventions may be possible, especially for the children and women of reproductive age.

Key Words: isolated tubal torsion, Laparoscopic salpinxectomy,

ÖZET: Amaç: Preoperatif olarak izole over torsiyonu tanısı konulmuş ve acilen müdahalesi yapılmış olgunun sunumu

Olgu: 43 yaşında kadın hasta 8 saat önce suprapubik bölgede ani başlangıçla ortaya çıkan ağrı, mide bulantısı ve kusma şikayetleri ile başvurdu. Hastanın yapılan transvajinal ultrasonografisinde kalın septasyon ve lobulasyonların yer aldığı 8 cm'lik anekoik bir kist saptandı. Doppler incelemede ise kistik yapının etrafında kan akışı gözlenmedi. Hasta operasyonu takiben 2. günde herhangi bir komplikasyon olmadan taburcu edilmiştir.

Sonuç: Akut pelvik ağrı ile gelen kadın hastalarda özellikle doğurganlık çağındaki kadın ve çocuklarda fertilitate koruyucu girişim şansının elden geçirilmemesi için tubal torsiyon her zaman akılda tutulmalıdır

Anahtar Kelimeler: İzole tubal torsiyon, Laparoskopik salpinxectomi

INTRODUCTION

Isolated torsion of the fallopian tube is a rare entity with a reported incidence of 1:500.000-1:1.500.000 (1,2). In cases of acute pelvic pain among female patients, it must be considered in the differential diagnosis. Because, urgent surgery can save the tube, or at least can prevent secondary ovarian infarction.

Although it is rarely seen and has nonspecific clinical symptoms and signs, it may be diagnosed preoperatively if considered in the differential diagnoses. In this report, we present a case of isolated tubal torsion diagnosed preoperatively and managed promptly.

CASE REPORT

A 43-year-old woman presented to the emergency department with sudden onset pain in the suprapubic area that had been lasting for approximately 8 hours, and nausea and vomiting which was present for the last 2 hours. Patient had 2 children, menstruating regularly, was on the seventieth day of the menstrual cycle, using no contraceptive method other than coitus interruptus and had an unremarkable past medical history. She did not have any complaint regarding urinary system. History of epigastric pain, changes in bowel habits, vaginal discharge or bleeding were not noted.

Her vital signs were normal. Tenderness, defense and rebound tenderness in right lower quadrant of the abdomen was detected on physical examination. Pelvic examination revealed a right adnexal mass and tenderness in the suprapubic region which is more pronounced at the right side. In the laboratory evaluation serum pregnancy test was negative, white blood cell count was slightly elevated to 12.000. Whole abdominal sonography was normal except

the cystic mass in the right adnexal region. In the evaluation of mass with transvaginal sonography, 81x36x53 mm anechoic cyst with thick septations and lobulations was found (Fig 1), no blood flow was detected around the cyst in doppler examination. Sonographic and doppler examination of both the ipsilateral and contralateral ovaries were normal.

With these clinical, radiologic and laboratory findings, right tubal torsion was the most likely preoperative diagnosis and an urgent laparoscopy was performed. The uterus, left tube, left ovary and right ovary were appeared normal but the right tube was seen as a congested, edematous, hemorrhagic and necrotic mass measuring approximately 8 cm in diameter. It was twisted four times upon itself and severely dilated (Fig.1).

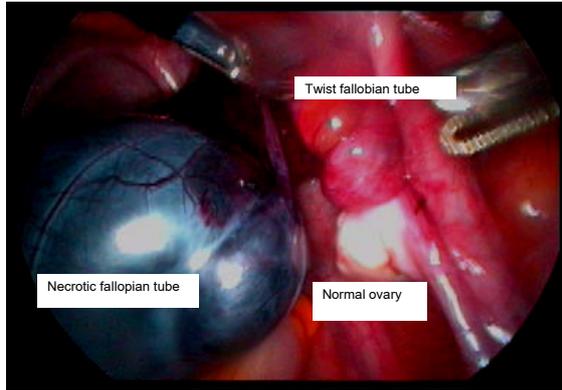


Figure 1. Laparoscopic examination showed a necrotic and twist fallopian tube.

Due to the necrotic appearance of the tube, laparoscopic right salpingectomy was performed, detorsion was not tried. Histologic examination revealed acute inflammation with neutrophilic infiltrate, extensive hemorrhage, edema and necrosis of the tubal wall. In the postoperative period no complications were encountered and the patient was discharged home two days after the operation.

Discussion

Considering the clinical, laboratory and ultrasonographic findings of our patient, isolated fallopian tube torsion was the most likely preoperative diagnosis. The history of the patient was not appropriate with that of acute appendicitis, due to sudden occurrence in suprapubic region. Patient didn't have a history of nasty vaginal discharge or dyspareunia and sudden occurrence of the symptoms made the diagnosis of pelvic inflammatory

disease less likely. Presence of an adnexal mass and no change in bowel habits excluded inflammatory bowel diseases and diverticulitis. Negative pregnancy testing ruled out ectopic pregnancy. Ultrasonographic examination of the abdomen was not consistent with that of acute appendicitis. Presence of flow in the ipsilateral ovary and absence of flow in the lesion beside the ovary made the diagnosis of ovarian torsion less likely. Ultrasonographic appearance of the mass and absence of flow in the lesion was not consistent with the inflammatory masses.

Most of the time exact etiology underlying the isolated fallopian tube torsion can not be shown. But in the literature some predisposing factors are defined. These include; I) anatomical abnormalities like hydrosalpinx, hematosalpinx, long mesosalpinx, hydatis of morgagni, tubal malformations, paratubal cysts II) physiological abnormalities such as hypermotility, tubal spasms and abnormal peristalsis, III) hemodynamic abnormalities like venous congestion in the mesosalpinx, IV) sudden body position changes, trauma, V) previous surgery such as tubal ligation, partial salpingectomy, VI) uterine enlargement due to pregnancy or tumor (3), VII) abnormalities of adjacent organs, such as ovarian and paraovarian masses, VIII) peritubal adhesions.

Fallopian tube torsion is seen more commonly in the reproductive age group and on the right side of the patients. The proposed reasons for this right side predilection include the presence of sigmoid colon on the left side preventing the left tube from twisting around its pedicle due to mass effect (4), relatively less venous flow on the right side and right sided location of appendix causing suspicion for appendicitis and thus more frequent operations in right sided acute lower abdominal pain (5)

Preoperative diagnosis of isolated tubal torsion is extremely rare. This is not only due to the vague clinical presentation and insufficiency of imaging findings but also the rarity of the condition causing the clinician not to bring in mind the possibility of isolated fallopian tube torsion and the prolonged investigations to rule out more common causes of acute lower abdominal pain(6) contributes to this. Clinical history, pelvic examination findings, laboratory and sonographic findings and the awareness of the possibility of this condition all together should be taken into consideration for an early diagnosis. In the setting of acute adnexal pain, the sonographic findings of a dilated fallopian tube with a normal appearing ipsilateral ovary and a

history of previously mentioned predisposing factors especially like the previous tubal surgery and prior evidence of adnexal pathology (hydrosalpinx, ovarian cyst or other adnexal mass) should alert one to the possibility of isolated tubal torsion (7). Early diagnosis of the condition can allow possible preservation of the affected tube. Although pregnancy has been reported after surgical detorsion of the tube (8), spontaneous detorsion (9) and recurrent tubal torsion has also been described in the literature (10). So, after conservative management of the condition, possibility of recurrence should also be taken into consideration (6).

Some sonographic features may aid in the preoperative diagnosis of isolated fallopian tube torsion. An elongated cystic structure with a tubular configuration is the most commonly encountered finding (7). Dilated fallopian tube, hyperechoic wall, a folded configuration, foci of echogenicity protruding into the lumen possibly related to the wrinkled fallopian tube epithelium, a spiral appearance related to the pattern of papillary projections, tapering of the tube as it approaches the uterine cornua and a possible point of torsion are the sonographic findings which should raise the suspicion of tubal torsion (7).

During the color doppler examination, documentation of no flow or high impedance blood flow with reversed diastolic flow in the mass and normal ipsilateral ovarian blood flow are the characteristic findings of the condition. In inflammatory masses with tubal configuration, although potentially similar ultrasonographic findings are found, in doppler examination signs of low resistance to flow are seen conversely. But sometimes with progression of the torsion, change in flow pattern may be observed. Progression of the disease causing development of an inflammatory reaction or incomplete torsion with transient spontaneous resolution or duplex doppler sampling error may cause this phenomenon. Since the uterine tube has 2 vascular supply, one from uterine artery, one from ovarian artery, cessation of blood flow from one arterial side and resultant necrosis of the tube may cause inflammatory response in the other. Fever may develop after this inflammatory response and complicate the diagnosis further. Due to this double blood supply torsion may produce various degrees of ischemia prior to frank infarction (7). Torsion can be either intermittent or incomplete

initially, and the patient can present with a history of intermittent abdominal pain and this may proceed with spontaneous resolution or complete torsion with tubal torsion (11).

In conclusion, tubal torsion should always be kept in mind in a patient presenting with acute pelvic pain. So the early diagnosis and fertility sparing interventions may be possible especially for the children and women of reproductive age.

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