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Case report-Olgu sunumu

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Isolated fallopian tube torsion: A rare case

İzole fallop tüp torsiyonu: Nadir bir olgu

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Abstract

Isolated fallopian tube torsion is an uncommon cause of acute low abdominal pain in women. We present a case of 18-year-old virgin girl with isolated right fallopian tube torsion. She was admitted to the Emergency Department of our hospital with abdominal pain. Pelvic ultrasound revealed bilateral enlarged ovaries containig 4 cm and 3 cm cystic masses and some free fluid in the pouch of Douglas. An urgent laparoscopy was performed by a general surgeon. They revealed a dusky blue twisted right hydrosalpinx with a twist of the long axis of a necrotic right fallopian tube. Laparotomy was performed due to restrictions of laparoscopy in detorsion of the pelvic mass. A right salpingectomy was performed subsequently. In conclusion; surgical treatment should not be delayed for salvage the tube and preserve fertility in suspicion of tubal torsion.

Keywords: Abdominal pain, fallopian tube, laparoscopy, salpingectomy

Özet

İzole fallop tüp torsiyonu kadınlarda yaygın olmayan bir akut batın nedenidir. Hastanemiz acil servis departmanına 18 yaşında ve bakire olup karın ağrısıyla başvuran bir olguyu sunmayı amaçladık. Pelvik ultrasonda 4 cm ve 3 cm'lik kistik kitleler içeren bilateral boyutları artmış overler ve Duglas poşunda serbest sıvı izlendi. Acil laparoskopi kararı verildi. Nekrotik uzun aksı boyunca kıvrılmış sağ tüple birlikte koyu mavi renkte sağ hidrasalpinks olduğu görüldü. Genişlemiş pelvik kitlenin detorsiyonunda laparoskopinin teknik kısıtlılıkları olması üzerine laparotomiye geçildi. Sağ salpenjektomi uygulandı. Sonuç olarak; tubal torsiyon şüphesinde fertilite korumak ve tubayı kurtarmak için cerrahi tedavi geciktirilmemelidir.

Anahtar sözcükler: Karın ağrısı, fallop tüpü, laparoskopi, salpenjektomi

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Introduction

Fallopian tube torsion is an uncommon cause of acute lower abdominal pain in women [1]. The literature approximates the overall incidence as 1 in 1.5 million women [2]. Therefore only small series and several case reports on this issue have been published in the literature [3]. Although torsion may be seen in a normal tube there is almost always a predisposing factor with these rare cases such as hydrosalpinx, adnexal mass or previous tubal surgery [4]. The preoperative diagnosis of tubal torsion is possible in less than 20% of reported cases by using transvaginal color Doppler ultrasound [5]. We report a case of tubal torsion in an 18-year-old girl to make an awareness in differential diagnosis of this rare entity.

Case report

A 18-year-old virgin girl was admitted to the Emergency Department of our hospital, with abdominal pain. The pain was in the right lower abdomen that started 3 days before and was worsening in nature. She had nausea and vomited once.

The patient denied any urinary or bowel symptoms, recent vaginal discharge or bleeding. She had been well before the onset of the pain. There was no history of surgery or meaningful medical history. The patient had regular menstrual cycles occuring every 28 days and her menarche was started at 12 years of age. She was not taking any medication and never used contraceptive pills. On admission, her body weight was 52 kg. Her temperature was 36 ^{0}C. Her blood pressure measured 100/70 mm/Hg, and her pulse rate was 84 beats per minute. She was on the tenth day of her menstrual cycle. On her physical examination, palpation revealed deep tenderness in the right iliac fossa. No rebound tenderness was noted. Bowel sounds were present. A complete blood count showed a white cell count of 13.6x103/mm^3 with 91% neutrophils. The hematocrit was 32.5% and C-reactive protein was 0.05 mg/L. β-human chorionic gonadotropin was negative. Pelvic ultrasound showed bilateral enlarged ovaries containig 4 cm and 3 cm cystic masses and some free fluid in the pouch of Douglas.

While performing labarotuary tests; the patient's pain and nausea persisted and a diagnosis of acute abdomen was made by the general surgeon and an urgent laparoscopy was performed subsequently. About 150 mL of serohemorrhagic fluid was discovered in the pouch of Douglas. The uterus appeared thin and normal, as did the left fallopian tube, the left and the right ovary. There was a dusky blue twisted right hydrosalpinx with a twist of the long axis of a necrotic right fallopian tube (Figure 1).

Detorsion of the right necrotic tube could not be managed laparoscopically so laparotomy was performed. After detorsion of the tube, we waited 30 minutes to determine the revascularization of the tube. Although we have tried to preserve the whole tube because of future fertility of the patient, after 30 minutes waiting there was no revascularization. Therefore, right salpingectomy was performed.

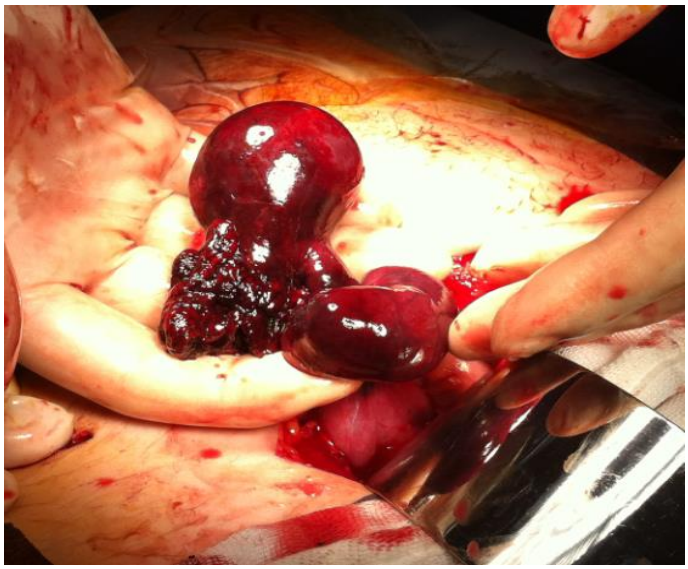

Figure 1. Intraoperative image of the right fallopian tube torsion.

Histologic examination confirmed hemorrhage, vascular congestion and ischemic necrosis of the right fallopian tube, consistent with tubal torsion. Her postoperative course was uneventful, and she was discharged home after her postoperative second day.

Discussion

Pelvic masses are defined as common causes of abdominal pain in reproductive aged women. Varras et al. [6] reviewed 92 cases over a 10-year period and reported that adnexal torsion was most commonly associated with benign processes (89%) and usually occurred in patients younger than 50 years (80%). Similar to our patient, the diagnosis of fallopian tube torsion in adolescent females is often not diagnosed clinically, but is essentially diagnosed at laparotomy or laparoscopy when performed for investigation or management of acute abdominal pain [7]. Torsion of the right fallopian tube is more commonly described than that of the left fallopian tube like in our case [8]. The most common symptom of fallopian tube torsion is convulsive pain at the waist or pelvis, radiating to the same side. It tends to increase in strength with time and to radiate to the thigh with rebound tenderness. It is often accompanied by nausea, vomiting, urinary frequency and urgency with voiding difficulties as observed in our patient [9]. But all of these symptoms are nonspecific. The differential diagnoses should include acute appendicitis, torsion or rupture of an ovarian cyst or follicle, ectopic pregnancy, pelvic inflammatory disease, endometriosis, degeneration of leiomyoma, intestinal obstruction or perforation, and renal colic [9]. White cell count is often, but not always, normal. In our patient the white cell count was 13.6x103/mm^3, which was mildly elevated. The real cause of fallopian tube torsion is unknown. It may be associated with intrinsic and extrinsic tubal factors. In this patient, there were no specific pathological findings.

The management of this condition requires an emergent surgery. The surgical approach to torsion of the fallopian tube depends on the operative data and the patient's age and reproductive wishes [7]. Available procedures include either traditional resection when the tube cannot be salvaged, as performed in our case, or untwisting and fixation of the tube. If torsion is incomplete or recent and the tubal tissues remain viable, primarily in younger women and in order to preserve fertility [10]. Although isolated torsion of the fallopian tube is a rare condition, it should be considered as part of the differential diagnosis of an adnexal mass. Delayed diagnosis of the tubal torsion may lead to irreversible necrotic change, and even damage to the ipsilateral ovary [11]. In our case, the right tube was found to be necrotic at the time of laparoscopy. Salpingectomy was performed to the necrotic tube because of its gangrenous degeneration.

In conclusion, acute pelvic pain of women at any age should be evaluated carefully considering the risk of fertility loss. Surgical treatment should not be delayed to salvage the tube and preserve fertility in suspicion of tubal torsion.

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