

Case Report

A huge pelvic mass in a 14-year-old adolescent with isolated fallopian tube torsion

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Abstract. Isolated fallopian tube torsion is seen rarely in sexually inactive early-adolescent girls. It can present with lower abdominal pain and pelvic mass. In this report, we aimed to draw attention to this rare clinical condition in childhood by presenting a 14-year-old girl. Isolated fallopian tube torsion should be considered in adolescent patients who have colic pain, especially unilateral pelvic localization with abrupt onset. Early diagnosis and prompt surgical intervention can save fallopian tubes in tubal torsion.

Key words: Fallopian Tube, pelvic mass, torsion

1. Introduction

Although the rare incidence of isolated fallopian tube torsion in sexually inactive early-adolescent girls, it must be considered in patients with lower abdominal pain and pelvic mass. Delayed diagnosis can cause tissue injury, so early diagnosis and prompt surgical intervention is necessary to prevent organ loss (1). In this report, we aimed to draw attention to this rare clinical condition by presenting a 14-year-old girl who has isolated fallopian tube torsion.

2. Case Report

A 14-year-old virgin girl admitted to our outpatient clinic with the complaint of pelvic pain that had started one day ago. The patient had a severe left sided pelvic colic pain which not accompanied by vomiting. On her physical examination, a painful mass was palpated in the left suprapubic region. Additionally, peritonitis findings were determined in the left lower quadrant. The white blood cell count was

16,9x10⁹/L, 14 leucocytes and 5 erythrocytes were detected in every high-powered field in the urinary sediment. The complete blood count and the biochemical parameters were otherwise normal. On pelvic ultrasonography, a mass was observed in the lateral portion of the left ovary of 9x5 cm size, which was well demarcated and has cystic areas. The originated organ could not be determined precisely by ultrasound. On computed tomography, a cystic well-demarcated 10x13 cm mass was detected at the margin of left gonad which was not connected to the ovary. Patient underwent urgent surgery. Isolated fallopian tube torsion without ovary was determined during surgery. The vascularization of tube was impaired and had an extremely enlarged distal portion. No pathologies were encountered in the left ovary (Figure 1, 2). Distal partial salpingectomy was performed. On histopathological examination, the cystic structure which was lined with ciliary epithelium displaying findings of edema, congestion and hemorrhage was considered to be consistent with torsioned tuba uterina. No complications occurred and the patient was discharged on the 3th day of hospitalization.

3. Discussion

Adnexial torsion comprises 3% of all gynecological emergencies (2). However, isolated tubal torsion is quite a rare disorder both in children and adults. The incidence of tubal torsion has been reported as 1/1.500.000 (3). Due

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Fig. 1. Appearance of healthy ovary (white arrow) and fallopian tube after detorsion



Fig. 2. Appearance of torsioned fallopian tube

to the absence of specific clinical and radiological findings in fallopian tube torsion diagnosis is delayed and irreversible organ injuries are detected during surgical treatment.

Despite various theories having been suggested, the specific cause of fallopian tube torsion is not known yet. These theories can be listed as anatomical abnormalities such as a long mesosalpinx, hematosalpinx, hydrosalpinx; physiological conditions such as abnormal peristalsis or hypermotility and vascular pathologies such as venous congestion in the mesosalpinx (1,4,5). Furthermore, fallopian tube torsion has been reported as developing after trauma, previous operations, pelvic inflammatory disease and gravid uterus. In our case a long mesosalpinx was considered as the cause of torsion.

Torsion of adnexial structures is usually seen on the right side (1,4,5). The reasons for right side dominance may be the location of the sigmoid colon on the left side or congestion in the mesosalpinx related to slow venous blood flow on the right side. Tubal torsion is usually detected incidentally during an appendectomy

procedure for right quadrant pain presentation, so right tubal torsions are encountered more frequently. However, left sided abdominal pain presentations can resolve spontaneously, therefore diagnosis can be overlooked. In our case, torsion was left sided. The most common symptom is pain in the lower abdomen or the pelvis at the affected side. It may radiate to the flank or thigh. The characteristics of this severe pain are to be colic and recurrent with a sudden onset. The other accompanying findings are vomiting, pollakiuria, difficulties in micturition, gastrointestinal system complaints and a small amount of uterine bleeding. However, all of these findings are non-specific. Acute appendicitis, ectopic pregnancy, degenerative leiomyoma, and ovarian torsion and rupture are among the differential diagnoses of fallopian tube torsion (3, 6). Radiological findings of tubal torsion are also non-specific and correlation with the clinical findings is essential for certain diagnosis. As in our case, the presence of cystic or solid formations in the adjacent to the ovaries should be considered as tubal torsion despite the absence of a pathology related to the ovaries on ultrasound or tomography.

Treatment of tubal torsion can be done by laparoscopy or open surgery. Preserving fertility must be the main target in patients without necrotic tubas or suspected malignant lesions. Treatment options can be listed as tubal detorsion, salpingectomy or salpingotomy (6,7). Distal partial salpingectomy was preferred in our patient due to its necrotic distal portion. The increased risk of ectopic pregnancy and recurrent tubal torsion was reported following detorsion in these patients because of impaired tubal function (7). Isolated fallopian tube torsion should be considered in adolescent patients who have colic pain, especially unilateral pelvic localization with abrupt onset. It should be remembered that early diagnosis and prompt surgical intervention can save fallopian tubes in tubal torsion.

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