Fallopian Tube Autoamputation after Acute Large Endometrioma Torsion

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Abstract

Adnexal torsion is the fifth most common gynecological emergency. However, endometrioma torsion is a very rare entity due to the associated pelvic adhesions. A 26-year-old woman presented to the emergency department complaining of acute lower abdominal pain for the past 6 h. Physical examination showed localized left iliac fossa tenderness. Ultrasound showed a 13 cm endometrioma with a normal color Doppler. Laparoscopy revealed a 13 cm large endometrioma arising from the left ovary. The left Fallopian tube was amputated at its attachment to the left cornua. Reconstruction of the ovary was done and the specimen was retrieved through the umbilicus inside a bag. Autoamputation of the Fallopian tube alone, although very rare, is typically associated with a preceding torsion. It is critical to be aware of adnexal torsion, as it can have implications for future fertility. Therefore, laparoscopic detorsion and cystectomy are the gold standard management.

Keywords: Autoamputation, fallopian tubes, fertility, laparoscopy, ovary

INTRODUCTION

Torsion of endometriomas is uncommon due to associated pelvic adhesions.[1] Nevertheless, the fifth most common gynecologic emergency is acute adnexal torsion. Unilateral absence of the tube or ovary is an exceptionally rare condition that occurs in 1:11 241 females, which can be attributed to either congenital or acquired causes.[2] We report an interesting case of autoamputation of the left Fallopian tube after acute endometrioma torsion and emphasize the value of early diagnosis and its potential effects for future fertility. To our knowledge, there is no such case of Fallopian tube acute autoamputation that has been reported so far.

CASE REPORT

A 26-year-old woman presented to the emergency department complaining of acute lower abdominal pain associated with nausea and vomiting for the past 6 h. She had a previous history of chronic pelvic pain and dysmenorrhea. She had no relevant medical or surgical history. Physical examination showed guarding and localized left iliac fossa tenderness. Ultrasound showed a 13 cm endometrioma with a normal color Doppler. However, torsion was not excluded. Laboratory tests were unremarkable. Laparoscopy was performed using a high-pressure entry technique. Veress needle was inserted through the umbilicus followed by a 10 mm port for the camera. Another two accessory ports were inserted on the left side.

Intraoperative findings revealed a large endometrioma arising from the left ovary. The endometrioma was around 13 cm in size. There was torsion of this cyst on its pedicle by two turns [Figure 1]. The left Fallopian tube was amputated at its attachment to the left cornua with fresh bleeding coming from its end [Figure 2]. Hemostasis was achieved using...
bipolar electrocautery. Complete aspiration of the cyst using a 5 mm suction needle was performed to accomplish the adnexal detorsion. Thereafter, the left ovary was transversely cut, followed by complete endometrioma enucleation. After preservation of hemostasis by point coagulation, reconstruction of the ovary was done using Vicryl 2-0 intracorporeal suturing. The specimen was retrieved through the umbilicus inside a bag. The postoperative period was uneventful, and the patient was discharged from the hospital 12 h after surgery.

**Discussion**

Fallopian tube autoamputation, while very rare, can be either congenital or acquired. In the majority of cases reported previously, a history of acute pain followed by chronic pain was reported. Isolated Fallopian tube torsion was the first to be described in 1890, and it affects roughly one in every 1.5 million women. In adults, Fallopian tube torsion risk factors have been classified into intrinsic and extrinsic factors. Intrinsic risk factors include congenital Fallopian tube defects, tubal ligation, tubal neoplasms, hydrosalpinx, hematosalpinx, excess tube length or tortuosity, excessive peristalsis, and tubal hypermobility or spasm. Extrinsic risk factors encompass para tubal or ovarian masses, pelvic adhesions, mesosalpinx congestion, abrupt body motions, trauma, and pregnancy. These risk factors are assumed to create a hinge around which the Fallopian tube will twist one or more times. Without timely intervention, torsion can result in ovarian injury, loss of tubal function, and infertility due to chronic autoamputation. However, in our case, the patient presented with acute pain due to endometrioma torsion concurrently with the left Fallopian tube autoamputation. Clear evidence of torsion and Fallopian tube autoamputation was shown at laparoscopy. It is worth mentioning that endometrioma torsion is a very rare entity due to associated pelvic adhesions. Furthermore, torsion is burdensome due to space limits in such large space-occupying lesions. Around 2.7% of all gynecological emergencies are attributed to adnexal torsion. Early diagnosis can help in avoiding permanent ovarian and Fallopian tube damage.

Adnexal torsion lacks specific clinical signs and symptoms, which makes it difficult to be diagnosed preoperatively. Even if Doppler demonstrates vascularity, a high index of suspicion and prompt surgical intervention is required to retain ovarian function. To maintain potential reproductive function, conservative surgery should be favored. Therefore, Laparoscopic detorsion and cystectomy is the gold standard management. Its use can assist patients by preventing unnecessary surgery and therapy delays, shorter operation and hospital stay, as well as a less invasive intervention that reduces future adhesions and improve fertility.

In conclusion, large endometriomas, even though very rare, may undergo torsion and present as acute abdominal pain. Acquired Fallopian tube autoamputation is usually associated with a preceding event of torsion. It is important to be aware of the possibility of adnexal torsion in all female patients of all ages presenting with acute lower abdominal pain as it may have consequences for potential fertility if not managed promptly.

**Ethical approval and declaration of patient consent**

This report has been approved by Ibn Al-Haytham Hospital Research Ethics Committe (approval number: 18/IHH/2021). The informed patient consent was obtained.

**Financial support and sponsorship**

Nil.

**Conflicts of interest**

There are no conflicts of interest.

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**Figure 1:** Laparoscopic view showing part of the endometrioma (E), the torsion of the endometrioma on its pedicle (black arrows), and the site of the Fallopian tube amputation (white arrow).

**Figure 2:** Laparoscopic view showing the amputation site of the left Fallopian tube. Black arrow: Designate the attachment of the Fallopian tube to the left cornua with fresh bleeding coming from its end.
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