



Isolated Fallopian Tube Torsion post Tubal Ligation- a Rare Entity: Case Report

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Abstract

Isolated Fallopian tube torsion with preserved ipsilateral ovarian function and a contralateral non torsioned hydrosalpinx is an atypical presentation of acute pelvic pain. We report a case of acute abdomen who, upon failed conservative management underwent emergency laparotomy to reveal a gangrenous mass. Histopathologic study confirmed a hydrosalpinx with hemorrhagic infarct. Hydrosalpinx of fallopian tube undergoing torsion mimicking an ovarian torsion is a diagnostic challenge and prompt intervention is imperative.

Keywords: *Isolated fallopian tube torsion, hydrosalpinx, laparotomy, acute abdomen.*

Introduction

Isolated Fallopian tube torsion is a rare surgical emergency in women of reproductive age group with an incidence 1 in 1.5 million¹. Probable causes include congenital anomalies, hydrosalpinx, pelvic inflammatory disease (PID), tubal ligation, adhesions, adnexal masses, and trauma.

Case Study

History

The lady concerned was a 32 year old sterilised multigravida with history of two C-sections presented at the casualty of O&G department with abdominal pain over a day, acute in onset, throbbing in nature, with temporary relief from

analgesics. There was no associated bladder or bowel symptoms.

Evaluation

On examination, she was tachycardic with a pulse rate of 120 bpm. She was normotensive and afebrile. On examination, focal tenderness was noted in right iliac fossa. The uterus was found to be bulky with reduced mobility and fullness was present on either fornices on bimanual pelvic examination.

Her blood investigations revealed that she was suffering from anemia (Hb—9.7 gm/dl), increased white cell count, and increased CRP. Urine

pregnancy test was done regardless of her sterilisation history and found to be negative.

On imaging,

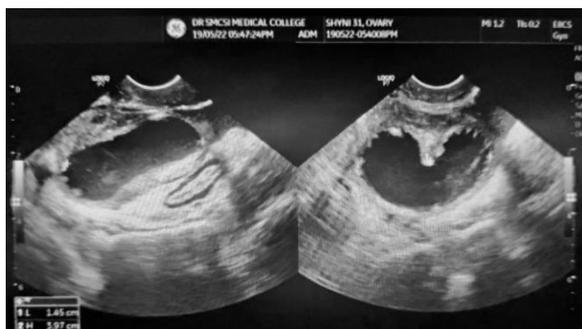


Figure 1: Ultrasonogram revealed a 6.6x5.8x3.6 cm heterogenous mass, solid component 3x2 cm with moderate vascularity, multiple thick septations (max 3mm) in the right adnexa close to the right ovary, with minimal free fluid in the pouch of douglas.



Figure 2: MRI showed a well defined complex solid and cystic lesion [6.5x5.4x4cm] with Thick wall (11mm) and central retort/tubular cystic component with blood fluid levels and multiple folds within - possibility of right tubal torsion.

Management

An empiric antibiotic therapy and analgesics were initiated on admission, and due to recurrent pelvic pain and on provisional diagnosis of right tubal torsion, she consented for emergency laparotomy. Upon opening, the right fallopian tube was found to be gangrenous and edematous due to complete torsion. Left fallopian tube showed a 4x2 cm hydrosalpinx. Bilateral complete salpingectomy was performed on the same sitting. Postoperatively, she developed fever on the 7th day, treated with intravenous antibiotics, antipyretics and discharged on the 10th day.



Figure 3: 7x4cm gangrenous hydrosalpinx in lateral segment of post sterilised tube with torsion twice.

Histopathology

On microscopy, the right fallopian tube appeared as a dilated tubular specimen, which has lost its mucous, and plicae showed extensive areas of coagulative necrosis and haemorrhage probably due to torsion, There is no chorionic villous or dense fibrosis or decidua to suggest ectopic gestation.

Impression

Right tubal section: Gangrenous hydrosalpinx

Left tubal section: Hydrosalpinx

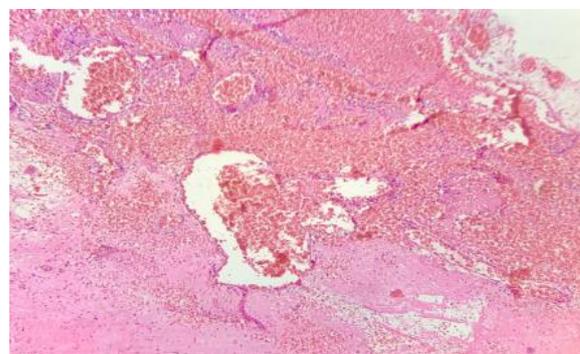


Figure 4: Right fallopian tube section showed a cystic lesion lined by fibrous wall with congested blood vessels.

Discussion

Isolated fallopian tube torsion is defined as torsion of only the fallopian tube, not involving the ovary². It was first reported by Bland-Sutton in 1890³. Tubal ligation is one of the risk factors for IFTT. The secretions retained in the distal end following the sterilisation procedure lead to formation of hydrosalpinx, fostering a focus of infection, eventually leading to torsion of the hydrosalpinx itself due to various factors such as hypermotility, abnormal peristalsis, sudden body position changes or trauma⁴.

Tubal torsion predominantly affects women in the reproductive age and more on the right side, because of the proximity of the left tube to the sigmoid mesentery and the relatively less venous flow on the right side⁵.

Ultrasound should be the first imaging modality for evaluation but unfortunately, conclusive diagnosis of IFTT is possible in only 30% of the cases because it mimics an adnexal or ovarian cyst⁶. Surgical exploration is the only way to confirm the clinical suspicion of IFTT⁷.

In our patient's case, given that the detorsion of the right fallopian tube was impossible; and this was a post sterilisation scenario unlike cases wherein fertility has to be preserved, we performed bilateral salpingectomy to resolve the clinical symptoms.

Conclusion

Lateral segment of sterilised tube with hydrosalpinx can undergo torsion without involving ovary and its blood supply and should be included as a differential diagnosis of acute abdomen.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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