

Isolated Fallopian Tube Torsion in Adolescents: Case Report and Recurrence Insights

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Introduction:

Isolated fallopian tube torsion is a rare condition in non-sexually active adolescent girls, with recurrence being even more uncommon. Its varied clinical presentation makes diagnosis challenging, and there is no consensus on the best management to prevent recurrence.

Patient Presentation:

- 18-year-old female
- 4/7 history of right iliac fossa pain
- Associated with nausea, reduced appetite and constipation.
- Patient was not sexually active.
- PmHX: diagnosed with isolated torsion of right hydrosalpinx on diagnostic laparoscopy which was treated with detorsion and salpingotomy.

One year later, she presented with similar symptoms.

- Imaging:
CT scan revealed an enlarged right ovary, swirling of the vascular pedicle, a 6 cm simple ovarian cyst, and moderate pelvic free fluid, suggestive of ovarian torsion.
- Clinical Course:
Subsequent diagnostic laparoscopy revealed a necrotic, twisted right fallopian tube in the pouch of Douglas, a normal adjacent right ovary, and a retroverted uterus with normal left adnexa. She underwent detorsion and right salpingectomy.

Discussion:

- This is a case of a patient presenting with **isolated fallopian tube torsion** (IFTT)
- IFTT was once regarded as extremely rare, but has been underrecognised- a recent case series suggested it accounts for **~10% of adnexal torsion cases** (1)
- IFTT primarily affects women aged **18 to 45**
- IFTT commonly presents with **unilateral lower abdominal pain, nausea and vomiting**
- Risk factors for IFTT include: Hydrosalpinx, sterilisation, pelvic inflammatory disease and cysts
- Imaging: **Ultrasound** is the preferred imaging with CT and MRI having a lower sensitivity
- Management: **Laparoscopy with detorsion is the gold standard**. However, salpingectomy is more commonly performed (2)
- Impact on Fertility:
There is no agreement in the literature on whether detorsion or salpingectomy is more effective in preservation of fertility. Studies indicate that detorsion of necrotic tubal tissue, instead of salpingectomy, may allow for gradual biochemical and histopathological recovery. However, despite epithelial integrity restoration after perfusion, tubal patency is not regained (3)
- Studies indicate that conservative treatment preserving the fallopian tube in cases of IFTT without hydrosalpinx is more effective, with no reported recurrence of torsion or symptoms. However, this approach is less effective in cases with hydrosalpinx, often requiring additional procedures due to recurrent torsion (4).
- **Early diagnosis** is key to preventing complications like infection, peritonitis, and fertility problems. (5, 6).

Conclusion:

This case underscores the rarity and diagnostic difficulty of isolated fallopian tube torsion (IFTT) in a non-sexually active adolescent. Timely diagnosis and intervention are crucial to avoid irreversible damage and preserve fertility. In cases involving hydrosalpinx, salpingectomy may be the most effective way to prevent recurrence.

References:

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