# **Case Report**

# ISOLATED FALLOPIAN TUBE TORSION: A CASE REPORT

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**Abstract:** In children right iliac fossa pain is a common presentation and has a lot of differentials. Of the uncommon differentials, fallopian tube torsion is a rare entity. It is usually not suspected and found peroperatively. We had a 12 years old patient who presented with right iliac fossa pain and was found having isolated fallopian tube torsion. Patient underwent right salpingectomy and is doing well to date.

**Key words:** fallopian tube, children, pelvis, appendicitis.

## Introduction

Isolated fallopian tube torsion is a rare cause of lower abdominal pain and emergency surgery in pediatric population. Its reported incidence is 1 in 1.5 million females of reproductive age, even more uncommon in adolescent age. Preoperative diagnosis is very difficult. Often treatment is delayed even in the presence of modern diagnostic techniques; surgical intervention is usually required to establish the diagnosis. We report a case of twisted right fallopian tube with gangrenous distal portion in a 12 year old female.

# **Case Presentation**

A 12 years old female presented in emergency with complaints of sudden abdominal pain in right lower quadrant, nausea, vomiting and fever. Her symptoms started 4 days ego. Her pain was sudden, colicky, non-radiating and became more severe at the day of presentation. She had a single episode of per vaginal bleeding 4 days back, which was dark red in colour and 3-5 ml in quantity. There was no history of trauma, dysuria, constipation or diarrhea. On examination she was febrile and had tenderness in right iliac fossa. Rest of general and systemic examination was unremarkable. Her laboratory investigations revealed leukocytosis with white blood count being 12000/mm.3 Ultrasonography showed a 6x2 cm right adnexal mass with mixed echogenicity, present in Right Iliac fossa. Patient was optimized and she was explored through Pffeninstiel incision. Her right fallopian tube was twisted at its distal part and was gangrenous; proximal part was edematous and inflamed. Her right ovary was slightly hyperemic while left ovary was normal looking. Gangrenous portion of fallopian tube was ligated and right sided salpingectomy was done. Post-operative period was uneventful. She was discharged on third post op day.



**Fig-1:** Right ovary and fallopian tube of patient showing torsion. Uterus left ovary is normal.

#### **Discussion**

Isolated fallopian tube torsion is a rare entity. Till 2014, only 45 cases are reported in pediatric population with mean age of 13.2 years. Risk factors which have been seen in adult patients include pelvic inflammatory disease, previous surgery, ectopic pregnancy, endometriosis and Para tubal cysts.<sup>2</sup> Causes for this rare entity can be classified into intrinsic, extrinsic and congenital causes. Intrinsic causes include hydrosalpinx, haematosalpinx, tubal neoplasms and prior surgery; extrinsic causes like ovarian mass, tubal adhesion trauma, uterine enlargement and venous congestion and congenital causes include incomplete distal mesosalpinx and excessive length of tube.3-4 Bernadus et al suggested that all of the above mentioned factors lead to mechanical blockage of the adenexal veins and lymphatics leading to pelvic congestion and local edema, which ultimately leads to enlargement of the adenexa and induces partial or complete torsion.3

Fallopian tube torsion is most often reported on right side because left sided fallopian tube is supported by sigmoid mesocolon and also right side is often explored due to suspicion of acute appendicitis.<sup>5</sup> In our case it was also right side involved.

Presentation is often delayed due to lack of pathognomonic symptoms. Diagnosis is usually

Confirmed on exploration. Ultrasound and CT scan can help by showing normal appearing ovaries with normal blood flow and a dilated tube with thickened, echogenic walls and internal debrinous or a convoluted echogenic mass. <sup>6-7</sup> In our case it was not suspected preoperatively also and was diagnosed peroperatively.

Different treatment options are available. If it is diagnosed preoperatively, laparoscopic adnexal detorsion is the procedure of choice particularly if ischemic damages appear to be reversible, and no malignancy is suspected. Efforts should be made to preserve fertility and a complete resection is

performed only when the tissue is gangrenous or there is a tubal or ovarian neoplasm suspected.<sup>8</sup>

## Conclusion

In conclusion although a rare cause of acute abdomen and pelvic inflammatory disease, it must be kept in mind as pelvic pathology and should be promptly treated.

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