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**Case Report**

# Torsion of hematosalpinx with bicornuate uterus

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## ABSTRACT

Torsion of fallopian tube is less frequent but significant cause of lower abdominal pain in reproductive age women that is difficult to recognize pre-operatively. Most of the cases with isolated fallopian tubal torsion have a delayed diagnosis and a subsequent delay of timely intervention that may result in failure to save the tubal function. Here we present a case of 22 years old female with torsion of hematosalpinx who presented with chronic lower abdominal pain that was successfully treated. Pre-operative imaging was non-specific. Laparoscopic detorsion and salpingectomy was performed, successfully preserving the ovaries.

**Keywords:** Bicornuate uterus, Hematosalpinx, torsion

## INTRODUCTION

An isolated torsion of the fallopian tube is extremely rare which occurs in 1 in 1.5 million women.[1] It is seen in reproductive age women of 21-40 years. This condition is rarely diagnosed preoperatively, a definitive diagnosis is always made after a laparoscopic or a surgical exploration, by the time a surgery is undertaken, the affected adnexa is usually damaged. An early diagnosis and treatment is required to prevent complications.

## CASE REPORT

A 22-year-old unmarried female presented with lower abdominal pain for 1 month, moderate in intensity, gradually progressive, colicky in nature and non-radiating. There were no aggravating or relieving factors. Her menstrual cycles were regular. She had no other significant past medical or surgical history. On examination, she was found to be conscious and oriented. Her vitals were stable. Abdominal examination revealed a mobile, tender, cystic mass of about 10x 8 cm palpable in the right lower quadrant of the abdomen. On investigating further, an abdominal ultrasound revealed a multilocular septated cystic lesion measuring 11x7 cm in the right adnexa with evidence of complete whirl of the vascular pedicle, likely due to torsion of a paraovarian or tubal cyst. Also, there was a left ovarian hemorrhagic cyst and no free fluid in the pouch of douglas. Her CA-125 was raised, rest all other hematological parameters were normal. Urine pregnancy test was negative. On laparoscopy, there was a huge cystic mass of nearly 10X10 cm occupying the pelvis. Uterus was found to be bicornuate (Figure 1). The right fallopian tube was markedly swollen. The tubo-ovarian mass had dense adhesions with omentum (Figure 2). On aspiration, dark reddish-brown colored cystic fluid was drained. The cystic mass initially encountered, turned out to be the dilated right fallopian tube with hematosalpinx with three turns of torsion. Laparoscopic detorsion followed by right salpingectomy was performed because of the irreversible ischemic changes in the enlarged tube. Left ovarian hemorrhagic cyst aspiration was done. Post operative period was uneventful.

**Table 1: Causes of fallopian tube torsion.**

| Intrinsic | Extrinsic |
|---|---|
| **Congenital tubal anomalies: Hydatids of morgagni, excessive length and tortuosity of the tube.** | Changes in the neighbouring organs: tumors of the ovary or paraovarian structures, uterine enlargement by pregnancy or tumor. omental or other adhesions to part of the tube. |
| **Acquired pathology: Hemato/hydroosalpinx, tubal surgery (tubal ligation), tubal neoplasms.** | Mechanical factors: movements and contractions of the neighbouring hollow viscus, trauma to the abdominal wall, sudden body position changes (Sellheim theory). |
| **Physiological abnormalities: tubal spasm, autonomic dysfunction and abnormal peristalsis of the fallopian tube.** | Haemodynamic abnormalities: pelvic venous congestion at the time of ovulation or premenstrual period. |

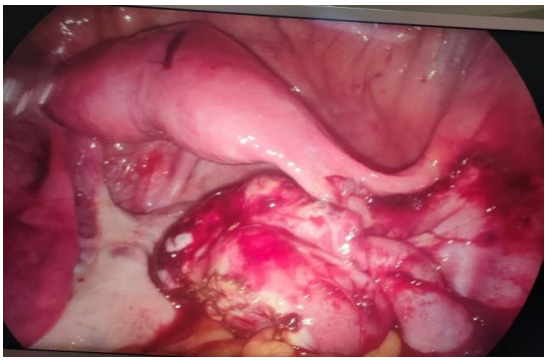

**Figure 1: Bicornuate uterus.**

## DISCUSSION

A number of causes may account for a hematosalpinx, but by far the most common being a tubal pregnancy.[2] In the presence of predisposing factors, the adnexal veins and the lymphatic vessel are prone to a mechanical blockage, leading to a local oedema and a pelvic congestion. The subsequent enlargement of the adnexa predisposes to a partial or complete torsion, along with the formation of a hydrosalpinx.[3-5] If there is an associated compromise in the arterial supply, it leads to a hemorrhagic infarction and a hematosalpinx.[6-8] The exact cause of torsion in the index case was not known. Torsion of the fallopian tube is usually unilateral and it occurs most commonly on the right side. This may be due to the presence of the sigmoid colon on the left side which prevents adnexal movements. Also, slow venous flow on the right side can be a cause of early congestion, dilatation and subsequent torsion.

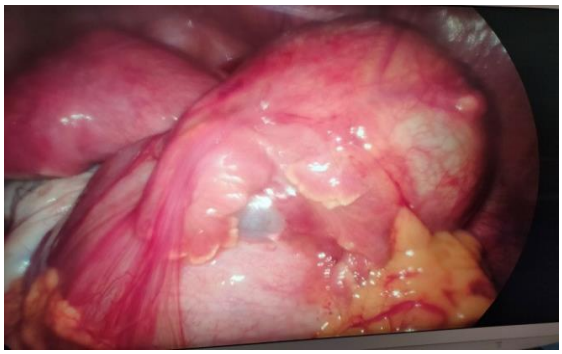

**Figure 2: Hematosalpinx with adhesions.**

## CONCLUSION

It is suggested that in the differential diagnosis of lower abdominal pain in a reproductive age woman, torsion of the fallopian tube leading to hematosalpinx should be considered, although it has low incidence. Imaging techniques may be suggestive but not conclusive. Expedited diagnosis is important to prevent adverse sequelae. However, the diagnosis can be challenging because the symptoms are largely non-specific.

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## REFERENCES

1. Bharathi A, Gowri M. Torsion of fallopian tube and hematosalpinx in perimenopausal women. J Clin Diagn Res. 2013;7:731-3.
2. Khairnar V, Valecha SM, Pandeeswari. Isolated twisted hematosalpinx misleading with ovarian cyst torsion. Int J Reprod Contracept Obstet Gynecol. 2019;8:1219-22.
3. Shukla R. Isolated torsion of the hydrosalpinx: a rare presentation. Br J Radiol. 2004;77:784-6.
4. Bernardus RE, Vander JW, Roex AJ. Torsion of the fallopian tube: some considerations on its etiology. Obstet Gynecol. 1984;64:675-8.
5. Bertolotto M, Serafini G, Toma P. Adnexal torsion. Ultrasound Clin. 2008;3:109-19.
6. Malhotra V, Dahiya K, Nanda S. Isolated torsion of the fallopian tube in a perimenopausal woman: A rare entity. J Gynecol Surg. 2012;28:31-3.
7. Furui T, Imai A, Yokoyama Y. Hematosalpinx and torsion of the fallopian tube in a virgin girl. Gynecol Obstet Invest. 1993;35:123-5.
8. Fortina E, Riboni F, Leo L. Fallopian tube torsion and hematosalpinx in a menopausal woman. Eur J Obstet Gynecol Reprod Biol. 2008;140:276-7.

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