

# Isolated Torsion Of The Fallopian Tube With Hydrosalpinx: A Rare Presentation

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## Abstract

Isolated torsion of fallopian tube is a rare event, which generally occurs in the reproductive age group. It is often difficult to diagnose it clinically or on imaging and for diagnosis laparoscopy remains the gold standard. This report describes such a condition in a patient who presented with pain lower abdomen and clinicasonographic evaluation revealed an adnexal mass. Diagnostic laparoscopy revealed dilated tube and diagnosis of hydrosalpinx with torsion of the tube was established. Torsion of fallopian tube is a rare event. It should however be kept in mind in the differential diagnosis of lower abdominal pain in women of all ages.

## INTRODUCTION

Isolated torsion of the fallopian tube is an uncommon cause of acute lower abdominal pain. The reported incidence is 1 in 1,500,000 women<sup>(1)</sup>.

It was originally described by Bland – Sutton in 1890<sup>(2)</sup>. Since there are neither any pathognomonic signs and symptoms nor there are any specific imaging or laboratory characteristics, there can be a delay in diagnosis and intervention may be delayed or postponed. However the routine use of laparoscopy in gynaecology has changed the approach towards both the diagnosis as well as the treatment of fallopian tube torsion.

## CASE SUMMARY

A 42 year old women, Gravida four Para two, abortion two was admitted with a history of pain lower abdomen for the last ten days. Pain was confined to left flank and was occasionally very severe in nature and had poor response to analgesics which were given to her. On examination she was afebrile and normotensive. On per abdominal examination no abnormal abdominal findings were recorded. On per vaginal examination, uterus was anteverted and multiparous sized and there was an oblong tender mass of 6cms x 2cms size on the left side. Her white blood cell counts were raised. Differential leukocyte count showed raised neutrophil count. Erythrocyte sedimentation rate was also raised. All her biochemical tests were normal. Ultrasonography showed presence of the long mass 6cms x 4cms size with slight

oedema and marked probe tenderness on left side with normal ovaries. A clinical diagnosis of adnexal mass with probable torsion was made. Diagnostic laparoscopy was done which revealed a dusky blue twisted left hydrosalpinx. No ovarian torsion was present. The peritoneum and adnexal region were clean with no evidence of endometriosis, pelvic inflammatory disease. Patient was taken for laparotomy and left salpingectomy was done with preservation of ovary. Histopathological examination revealed tubal dilation with epithelial flattening foci of haemorrhage within the wall.

## Figure 1

Figure 1: Isolated torsion of left hydrosalpinx



Hospital course was uneventful and uncomplicated.

## DISCUSSION

The exact cause of fallopian tube torsion is unknown.

Various theories for aetiology of fallopian tube torsion (3,4,5,6) have been postulated which are classified as:-

1. Anatomical abnormalities (long mesosalpinx, tubal abnormalities, haematosalpinx, hydrosalpinx, Hydatids of Morgagni)
2. Physiological abnormalities (abnormal peristalsis or hypermotility of tube, tubal spasm and intestinal peristalsis)
3. Haemodynamic abnormalities (venous congestion in the mesosalpinx)
4. Sellheim theory (sudden body position changes)
5. Trauma, previous surgery or disease (tubal ligation, pelvic inflammatory disease)
6. Gravid uterus

Torsion of fallopian tube is more common on the right side than on the left (6). This could be due to the fact that the mobility of the left tube is limited by the sigmoid colon or due to the slow venous flow on the right side, which may result in congestion. The other reason is that more cases of right sided pain are operated for suspected acute appendicitis (5), whereas left sided cases may be missed or resolve spontaneously. It rarely occurs before menarche or during menopause (3, 7). This dispersion of frequencies is apparently because most risk factors for tubal torsion occur mainly in the reproductive age group. The most common presenting symptom is pain, which begins in the lower abdomen or pelvis on the affected side but may radiate to the flank or thigh (6). The onset of pain is sudden and cramp like and may be intermittent (4). Other associated symptoms include nausea, vomiting, bowel and bladder complaints and scanty uterine bleeding (6). Temperature, TLC and ESR may be normal or slightly elevated. Imaging findings in torsion of fallopian tube are non-specific and clinical correlation is very important. Preoperative diagnosis of twisted fallopian tube has not been possible due to physical findings

associated with other common diseases and nonspecificity of the imaging findings. The differential diagnosis of torsion of fallopian tube includes acute appendicitis, ectopic pregnancy, PID, twisted ovarian cyst and degenerative leiomyoma (9,10). The management is laparoscopic adnexal detorsion in the reproductive age group and complete resection when the tissue is gangrenous, there is tubal or ovarian neoplasm or the women has completed her family (6, 10).

### CONCLUSION

Although fallopian tube torsion is uncommon, it should be included in differential diagnosis of acute lower abdominal pain in women. The lack of data and nonspecificity of imaging findings lead to a retrospective diagnosis of the condition, usually after diagnostic laparoscopy which remains the reference standard in diagnosis and treatment.

### References

1. Hansen OH. Isolated torsion of the fallopian tube. *Acta Obstet Gynecol Scand* 1970; 49:3-6.
2. Bland-Sutton T. Salpingitis and some of its effects. *Lancet* 1890; 2:1146.
3. Yukihiro Terada, Takashi Murakami, et al. Isolated Torsion of the distal part of the fallopian tube in a premenarcheal 12 year old girl: a case report. *Tohoku J. Exp. Med* 2004; 202:239-43.
4. McKenna PJ, Gerbert KH. Isolated torsion of the uterine tube in pregnancy-a case report. *J Reprod Med* 1989; 34:187-8.
5. Krissi, H., Orvieto, et al. Torsion of the fallopian tube following Pomeroy tubal ligation: a rare case report and review of the literature. *Euro. J. Obstet. Gynecol. Reprod. Biol.* 1997; 72:107-9.
6. Milki A, Jacobson DH. Isolated torsion of the fallopian tube. A case report. *J Repord Med* 1998; 43:836-8.
7. Powell JL, Foley GP, Llorens AS. Torsion of the fallopian tube in the postmenopausal women. *Am J Obstet Gynecol* 1972;113:115-8
8. Richards, H.M., Parsons, et al. Torsion of the fallopian tube: progression of sonographic features. *J. Clin. Ultrasound* 1998; 27:374-6.
9. Maynard SR, Peipert JF, Brody JM. Tubal torsion appearing as acute pelvic inflammatory disease. *J Am Assoc Gynecol Laparosc* 1996; 3:431-3.
10. Krissi H, Shalev J, et al. Fallopian tube torsion: laparoscopic evaluation and treatment of a rare gynaecological entity. *J Am Board Fam Pract* 2001; 14:274-7.

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