

## TORSION OF HYDROSALPINX

### (A Case Report)

by

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Torsion of the fallopian tube is not a common gynecological condition and hence the diagnosis is usually missed. If we go through the literature it becomes obvious that this condition is diagnosed after laparotomy. Eastman reported 3 cases in 1927, two diagnosed pre-operatively as twisted ovarian cysts and one as acute appendicitis. De Soldenoff R. reported torsion of normal fallopian tube in 1949. It was diagnosed as ectopic salpingitis. Wolf J. reported torsion of right tubercular pyosalpinx. It was diagnosed as acute appendicitis with pelvic peritonitis. Shaw R. E. reported bilateral hydrosalpinx with torsion of both the tubes. It was diagnosed as a twisted infected dermoid. In 1958 Malani Jadhav reported left-sided hydrosalpinx undergoing torsion diagnosed pre-operatively as twisted ovarian cyst. In 1960 Lygonis C. S. reported a case of right fallopian tube, which was twisted anticlockwise. This he diagnosed pre-operatively as ectopic twisted ovarian cyst. Humphreys G. A. reported two cases of torsion of fallopian tube which were also not diagnosed pre-operatively. K. Achari and R. Ramkisson reported a case in 1962

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of torsion of a left-sided hydrosalpinx which was clinically diagnosed as twisted ovarian cyst.

Bland Sutton (1890) reported the first case. Anspach (1912) was able to collect 95 cases and in 62 of them the lesion of the tube was hydrosalpinx. Eastman (1927) Goldberg and Olin (1939) added further cases making up a total of 108. Up till now the number has gone up to 122.

This inability to diagnose the condition of torsion of the fallopian tube pre-operatively induces us to report this case which we came across in our private clinic.

#### Case Report

Mrs. K. age 32 years, Hindu female, was admitted in our clinic on 18-1-63 with the complaint of pain in right iliac fossa. Pain started suddenly at 8 A.M. and gradually became worse. She had nausea but no vomiting. Patient had similar attacks of pain in the past 6 years, though the pain had been very mild. Only one attack was as severe as the present one for which she was admitted in Mayo Hospital 2 years back but the pain subsided and she was discharged. During these 6 years the patient had a number of antibiotics and chemotherapy.

Obstetric history — She had 5 full-term normal deliveries, 4 alive. Last delivery was only 1½ months ago. Patient said that she had similar pain through-out last pregnancy.

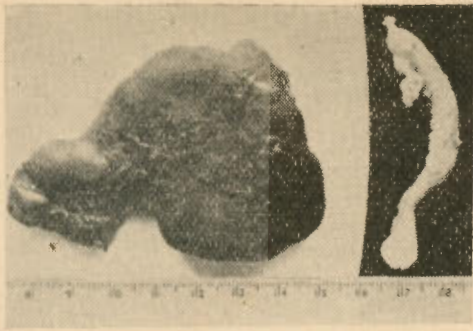


Fig. 1  
Torsion Hydrosalpinx right side with  
an appendix.

#### Examination findings

General condition of the patient was fairly good though she was groaning with pain. Heart and lungs, nothing abnormal detected. Pulse 88 per minute, of good volume and tension. She had tenderness in right iliac fossa, maximum at McBurney's point. No mass was felt per abdomen. Uterus anteverted, normal size. Roughness and tenderness in right fornix. Left fornix was clear.

Investigations. Total W.B.C. count 13,200. Differential W.B.C. count Poly, 82%, EO 2% and Lymphs 1b%.  
HB% 12 Gms.

Provisional diagnosis of acute appendicitis was made keeping possibility of acute salpingitis at the back of our minds. The tenderness was more at McBurney's point and pain was sudden in onset. Chronic history of pain was taken in favour of diagnosing appendicitis because the patient had lots of treatment for salpingitis with no relief.

#### Operation

Appendicectomy was done, but the appendix was not much inflamed. Right tube which had formed a hydrosalpinx was twisted in a clock-wise direction for  $2\frac{1}{2}$  turns and was absolutely gangrenous black and oedematus as seen in the picture. Right ovary was normal and so was left behind. There was no trace of residual infection except hydrosalpinx. There were no adhesions anywhere. Husband's vasectomy was

done so sterilization not done. Post-operative period was smooth and the patient was discharged 10 days after the operation.

#### Comments

Up till now 122 cases of torsion of fallopian tube have been reported by different authors. In the majority of the cases the affected tube is usually a seat of disease, although normal tube may undergo this complication as in the case reported by De Soldehoff. Commonest lesion of the tube is hydrosalpinx as it fulfils the conditions required for torsion of any organ i.e. freely mobile tumour, more or less fixed at the base of the pedicle. Pyosalpinx rarely undergoes torsion because it is usually associated with multiple adhesions.

Shute (1932) found 80% of the cases occurring during the childbearing period and 20% during puberty; 68% of the former were right-sided and 62% torsions were clockwise. There are two prevalent theories explaining the mechanism of torsion of the fallopian tube. (1) Haemodynamic theory i.e. the pulsation of the blood vessels in the mesentery of the tube can in some way initiate torsion. (2) Sellheim's suggestion that the movements of the body and abdominal wall could be transmitted and this could initiate torsion. With the second theory it is difficult to explain the transmission of the movements or jerks to the normal tube which is deep in the pelvic cavity.

In the present case possible mechanism of torsion may be that the patient had pelvic infection which went into chronic infection resulting in right-sided hydrosalpinx. Patient had delivered only 6 weeks back and

hence the hydrosalpinx was left in the empty belly with very lax abdominal wall. The movements might have been transmitted through the abdominal wall to the de ceased tube initiating the twist which, once started, increased because of the weight of the hydrosalpinx, and the tube became gangrenous.

Diagnosis of the twisted fallopian tube is difficult. It is usually diagnosed as twisted ovarian cyst or acute appendicitis before operation. This condition is less liable to acute shock and the onset is very slow and gradual as compared to twisted ovarian cyst.

#### Summary

(1) A case of torsion of hydrosalpinx of the right tube is reported.

(2) Literature is reviewed.

(3) Possible mechanism of torsion of hydrosalpinx in the case is discussed.

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