TORSION OF THE FALLOPION TUBE

(A Case Report)

by

NIRMAL SEN,* M.B.B.S., D.G.O., M.R.C.O.G.

Torsion of the fallopion tube is uncommon and is extremely rare in a non-pathological tube. The historical first case report by Sutton (1890) and the 200 cases reviewed by Ragad (1939) since, stressed on the fact that each case need reporting, reminding the clinician about the rare possibility. When confronted with differential diagnosis in case of an acute abdomen in an adolescent girl this rare possibility is generally unsuspected. The diagnosis is only confirmed at laparotomy, since torsion of a fallopion tube is reported to occur in otherwise normal tubes and more so since no classical clinical features lead to its preoperative diagnosis.

Case Report

Miss A. D.—14 yrs.—unmarried, school girl came with the history of, acute pain on right side of lower abdomen of two days duration, nausea but no vomiting at the onset of the acute pain, bleeding per vaginam —corresponding to her normal menstrual flow since morning of admission.

The pain radiated to the suprapubic region and gradually subsided with antispasmodics given by her family physician. She was referred as a case of acute appendicitis.

Menstrual History—Menarche—13 yrs., irregular cycles initially, Cycles 28-30 days since last six months, 3-4 days, flow average, mild premenstrual spasms relieved by common antispasmodics.

Clinical Tutor, Department of Obstetrics & Gynaecology-Bakerward, N.R.S. Medical College & Hospital, Calcutta.

Past History of Illness:- Nothing suggestive.

On Examination: Patient looked anxious, pulse 100 per minute, respirations 20 per minute. Blood pressure 110/70 mm of Hg, Pallor nil.

Systemic Examination: Nothing abnormal detected.

Per abdomen:—Muscle guarding was present. There was a diffuse lump 3½" x 1½" felt suprapubically in the right illiac fossa, tender to examining fingers. The outline was ill-defined and the mobility was restricted.

Rectal Examination: Uterus was normal in size-retroverted. There was a mass in the right fornix adherant to the uterus and felt through the pouch of Douglas, extremely tender to examination.

Special Investigation—Blood Hb-12.4 gm%; total leucocyte count—7000 per cmm, poly—72%, lympho—24%, mono 2%, eosino 2%; E.S.R.—20 mm 1st Hour.

Urine nothing relevant.

Management: With provisional diagnosis of subacute appendicitis or a twisted ovarian cyst, an immediate laparotomy was decided.

Laparotomy was done under general anaesthesia. On exposure the right tube was found distended, with two and half turns, blackish, almost gangrenous (fig. 1). The right ovary was incorporated in the lump showing blackish discoloration. The adjoining small guts did show flimsy adhesions around the tube suggesting mild peritonitis. Right salpingo-oophorectomy was done. The left tube was found healthy, apparently longer than normal tube. The left ovary was healthy. The abdomen was closed in layers. The postoperative period was uneventful.

Macroscopic Examination: The distended tube was filled with old blood clots and

there was haemorrhage in the thin wall of the tube.

Histopathology report showed no evidence of inflammatory changes.

Discussion

Ragad (1939) in his extensive review of 200 cases found torsion to have occurred in apparently healthy tubes in 24% of the cases. This high incidence support the chances of torsion in adolescence, when pathology of tubes is rare. Brady (1961) described a case of twisted haematosalpinx in a girl of 10½ years, which was the fourth case ever reported for torsion of the tube before menarche. Cassidy and Norbary (1911), and Aurvey (1929) reported torsion of tube in girls aged 14 years. Thomas (1954) reported cases of torsion of hydrosalpinx in a girl of 14 years.

Ragad's observation that torsion occurs more often in a normal tube have also been supported by Thomas (1954), Keller and Keller (1959) and Youssef (1962). Rao (1968), Gulati (1965), and Bhattacharjee (1954) reported cases of torsion of hydrosalpinx.

The causative factor for torsion of the tube may be intrinsic or extrinsic. Tube with a broad mesosalpinx has a greater chance for torsion. The etiology of torsion based on the anatomical background is the persistence of the spiral winding of tubal musculature, normally present in the foetal life. Disturbances in the normal peristalsis of the tubes causing spasm and leading to torsion is due to deviation from normal physiology. The haemodynamic theory, applies to cases with pelvic congestion, where spiral veins may precipitate torsion. Distension of the tube with serosanguinous fluid from tissue reaction may initiate torsion and end up in blocking of the abdominal ostium with further distension and torsion. The premenstrual congestion predisposes to torsion is based on the findings that torsion occurs more often at ovulation or immediately premenstrual. The incidence is higher on the right side and the torsion is more often clockwise as was in this case.

The onset of pain is usually acute, but settles down quickly and the radiation is either suprapubic or down the thighs. This causes confusion between acute appendicitis or acute urinary infection. Nausea is usually transient and is expected in acute appendix and in acute pyelonephritis or cystitis. There is usually no associated rise of temperature and the pulse rate remains normal which is against acute abdominal catastrophy. The haemoglobin remains normal which rules out an ectopic pregnancy or intracystic haemorrhage with a twisted ovarian cyst. Normal leucocytic count goes against intrapelvic inflammation.

Summary and Conclusions

A case of torsion of the right fallopian tube in a school girl of 14 years occurring immediately premenstrual is reported. The acute symptoms subsided and there was no evidence of acute abdominal condition. Immediate laparotomy is the rule and the scope of conservation of the affected tube and ovary is controvertial. Youssef (1962) was in favour of conserving the tube, if it regains normal colour on untwisting and fixing it to restrict mobility, but in this case it was gangrenous leaving no scope for conservation. The preservation of the ovary of the affected side is always attempted, but in this case it got incorporated to the twisted tube showing blackish discoloration, and was therefore removed. The apparent lengthening observed in the

left tube suggested the possibility of the torsion being caused due to its length.

References

1. Aurevy T. M.: Arch. Mens. Obst. & Gynec. 53: 3175, 1929.
2. Bhattacharjee V.: J. Obst. & Gynec. of India 20: 561, 1970.
3. Bland Sutton J.: Lancet 2: 1146: 1206 cited by De Seldenoff. R. Brit. Med. J.
4. Brady O. F.: Arch. Surg. 82: 329, 1961.
5. Cassidy M. A. and Norbury L.E.C.; Lancet 1: 98, 1911
6. Gulati B.: J. Obst. & Gynec. of India. 15: 333, 1965.
7. Keller R. and Keller B.—quoted by Youssef et al.
8. Ragad J.: Obst. & Gynec. 27: 509, 1939.
9. Rao Padma A. and Sulochana P. C.: J. Obst. & Gynec. of India 18: 1028, 1968.
10. Thomas J. M., Brit. Med. J. 2: 1271, 1954.
11. Youssef A. F., Fayad M. M. and Shafeek M. A.: Acta Obst. & Gynec. 41: 292, 1962.

See Fig. on Art Paper VII