TORSION OF THE FALLOPIAN TUBE AND OVARY COMPLICATING PREGNANCY

(A Case Report)

by

K. Bhasin,* M.B., B.S., M.D.

and

R. K. Narula,** M.B., B.S., D.G.O., M.D.

Torsion of the fallopian tube is an uncommon condition, and its occurrence complicating pregnancy is rare. There are few reports of torsion of a normal tube and ovary complicating pregnancy. Bland-Sutton (1890) reported the first case of torsion of the fallopian tube. Tamaskar *et al* (1964) stated that 122 cases of torsion of fallopian tube have been reported. In the majority of cases the torsion occurs in a pathological tube, although the normal tube may undergo torsion as in the case reported by Desoldenoff (1949). Downer and Brynes (1931) described 18 cases of torsion of undiseased adnexa in virgin girls. Baron (1934) reported a case of torsion of the normal ovary in a 7 year old girl. Schultz et al (1943) published a report of 5 cases of torsion of tube and ovary in children under 13 years of age. Hart Hansen (1970) reported 3 cases in postmenopausal patients. Bilateral torsion is very rare. Youssef *et al* (1962) claimed only 13 cases of bilateral torsion on record. The commonest lesion of the tube is hydrosalpinx. Pyosalpinx rarely undergoes torsion because it is usually associated with multiple adhesions. Regad (1933) reviewed 201 cases of torsion. Among these 24 per cent were normal tubes, 18 per cent in hydrosalpinx, 12 per cent during pregnancy, 14 per cent in hernial sacs and 13.5 per cent in tubes enlarged by salpingitis or ectopic pregnancy. Shute (1932) found 80 per cent of the cases during the childbearing period, 20 per cent during puberty and 68 per cent of the former were right sided.

Torsion of the adnexa can occur at varying stages of pregnancy from the first trimester to the early puerperium. Sheldon (1936) recorded a case at 6 weeks of gestation with a preoperative diagnosis of ruptured tubal pregnancy. Caldwell (1949) treated a case of torsion at 6 months of gestation. Robins and Washington (1954) described two cases of torsion of the left adnexa complicating middle and last trimesters of pregnancy. Savage (1936) reported a case of torsion in the puerperium.

Case Report

Mrs. P. K., aged 29 years, primigravida, was admitted on 3rd March, 1970, with severe pain in the right iliac fossa for 5 days. At the onset of the pain she was admitted in another hospital with the provisional diagnosis of acute appendicitis. She was given conservative treatment.

**Lecturer.*

***Assistant Professor.*

Department of Obstetrics and Gynaecology, All-India Institute of Medical Sciences, New Delhi-16.

Received for publication on 5-5-71.

Since her pain persisted in spite of the treatment, she left that hospital against medical advise. Her last menstrual period was on 26th January, 1970. She had no other complaints.

Physical examination on admission revealed an averagely built, moderately nourished woman, who seemed to be in great pain. Pulse rate was 120/per minute, B. P. 110/75 mm of Hg and the temperature was 37°C. She looked pale and was restless. There was tenderness and rigidity in the right iliac fossa.

On pelvic examination the cervix was directed backward, soft in consistency; uterus was anteverted, bulky and soft. An elongated, cystic, tender mass about 7×5 cms in size was felt in the right and posterior fornix; left fornix was free. Movements of the cervix were very painful. There was no blood on the examining finger.

On speculum examination cervix appeared blue. Laboratory investigations: Hb — 11 gm%, total leucocyte count was 10,000 cu.mm., urine analysis was essentially normal. A provisional diagnosis of ectopic pregnancy was made. Laparotomy was done on 3rd March, 1970. On opening the abdominal cavity there was no blood or fluid in the peritoneal cavity. The uterus was soft and bulky. It was pushed to the left side. The left ovary was normal in size and contained a corpus leteum and the left tube was normal. There was a dark bluish coloured mass to the right side of the uterus, extending into the pouch of Douglas. On lifting the mass out of the pelvis it became apparent that the mass was made up of the right adnexa which had undergone torsion 4 times at the cornual end. Right sided salpingo-oophorectomy was done and abdomen was closed. Her postoperative period was uneventful. She had a spontaneous abortion on the 4th April, 1970.

Specimen

The fallopian tube was dark bluish in colour measuring 7.5×2.5 cm. Cut surface revealed that the lumen was full of chocolate coloured fluid and the ovary was greyish black in colour measuring 5.5 × 3 cms. Cut section revealed that the ovary contained old clotted blood within a thin capsule.

Microscopic examination showed a haematosalpinx and haemorrhagic infarction of the fallopian tube and ovary.

Comments

Abdominal pain occurring during pregnancy can present a difficult problem in differential diagnosis. A preoperative diagnosis of torsion is extremely difficult. In the case reported a provisional diagnosis of ectopic pregnancy was made. The correct diagnosis of torsion of the fallopian tube and ovary was established at laparotomy. The patient usually presents herself with severe pain in the iliac fossa, nausea and vomiting, retention of urine and dysuria; shock is rarely present. Temperature remains normal but pulse rate may be raised. In the differential diagnosis one must consider appendicitis, ectopic pregnancy, ovarian cyst with torsion, urologic disease and hydrosalpinx. Several theories have been advanced concerning the aetiology of tubal torsion.

Payr (1906) propounded a theory of venous congestion leading to torsion. Selheim (1922) stated sudden changes in the position of the body may lead to torsion. The other prevalent theory is the haemodynamic theory. The pulsations of the blood vessels in the mesentery of the tube may in some way initiate torsion. Kohl (1956) and Kendrich (1965) reported a case of torsion arising in a woman with a history of sterilization. Blair (1962) stated that disturbance of the normal peristaltic movements of the tube may lead to torsion. A long narrow mesosalpinx or persistence of the spiral winding may also lead to torsion. The pathological changes in the tube depend on whether the torsion produces complete obstruction of blood supply and the time interval between the torsion and inspection of the tube. Gangrene may develop in late cases with com-

plete torsion. Laparotomy must be performed as soon as the diagnosis is made or suspected as the necrotic tissue and subsequent absorption of toxins may lead to uterine contractions and subsequent labour. If the torsion is recent and the tube is still viable it may be possible to conserve and stabilize it by suturing it to the round ligament.

References

1. Baron, C.: J. Am. M. Ass., 102: 1675, 1934.
2. Blair, C. R.: Surg. Gynec. & Obst. 114: 727, 1962.
3. Bland-Sutton, J.: Lancet. 2: 1206, 1890.
4. Caldwell, R. K.: New Engl. J. Med. 240: 421, 1949.
5. Desoldenoff, R.: Brit. Med. J. 2: 263, 1949.
6. Downer, I. G. and Brynes, O. A.: Am. J. Obst. & Gyn. 21: 665, 1931.
7. Hansen, O. H.: Acta Obst. Gynec. Scand. 49: 3, 1970.
8. Kendrich, J. G.: Obst. & Gynec. 25: 124, 1965.
9. Kohl, G. C.: Obst. & Gynec. 7: 396, 1956.
10. Payr (1906): Quoted by Hansen, O. H.: Acta Ogstet. Gynec. Scand. 49: 3, 1970.
11. Regard, J.: La Torsion des Trompes Uterines Librairie Camugli Lyon, 1932.
12. Robins, A. I. and Washington, D. C.: Am. J. Obst. & Gynec. 63: 932, 1954.
13. Savage, J. E.: Am. J. Obst. & Gynec. 32: 1643, 1936.
14. Selheim (1922): Quoted by Douglas Ringrose, C. A.: Cand. J. of Surg. 3: 161, 1960.
15. Schultz, R. L., Newton, W. A. and Clatworthy, W.: New Eng. J. Med. 268: 343, 1963.
16. Sheldon, D.: Am. J. Obst. & Gynec. 31: 682, 1936.
17. Shute, E.: Am. J. Surg. 16: 490, 1932.
18. Tamaskar, K., Tamaskar, P. K.: J. Obst. & Gynec. India. 14: 789, 1964.
19. Youssef, A. F., Fayad, M. M. & Shafeck, M. A.: Acta Obst. & Gynec. Scand. 41: 292, 1962.