MASSIVE HAEMORRHAGE FROM RUPTURE OF PELVIC VEINS IN PREGNANIY

(A Case Report)

by

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Massive intraperitoneal haemorrhage from rupture of the utero-ovarian or ovarian vessels during pregnancy is a rare event but its occurrence has been reported as early as eighteenth century. The first recorded case was observed by Baudelocque in 1778. In 1904, Williams first reviewed the literature on haemorrhage from utero-ovarian veins as a complication of pregnancy, citing 31 previously reported cases and adding one of his own. Since then Hodgkinson and Christensen (1950), Menaker and Cauble (1953), Samuelssen (1954), Conger and Paternite (1954), Millet *et al,* (1956), Charles (1957), Hill and Darling (1958), Diddle *et al,* (1958), Marrow (1960), Balz (1961) and Estep *et al,* (1974) added 53 cases of their own. The mortality in these cases was reported to be very high and sometimes it was as high as 50 per cent.

Because of the rarity of the condition, accurate diagnosis could not be reached with certainty in most of the cases. It is often mistaken with other obstetrical emergencies like rupture uterus, concealed accidental haemorrhage, perforating variety of hydatidiform mole, adnexal torsion or rupture and haemorrhage from degenerated fibroid Chowdhury (1961). Unless the clinician has the knowledge of this abnormal anomaly at the back of his mind, there will be delay in the diagnosis which may account for the high incidence of mortality.

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CASE REPORT

Mrs. F. M., a 30 year old Hindu female, housewife, 4th gravida, carrying 28 weeks of pregnancy was admitted on 30th March, 1974, at 10 A.M. in the Dept. of G. & O. B. S. Medical College, Bankura, with the complaints of generalised pain in the abdomen for 20 hours and vomiting for 5 hours. No history of trauma was available.

Obstetric History: Part 1 + 2. She had 2 spontaneous abortion at 2 months. Her third pregnancy ended in normal delivery of a living child 4 years ago.

Examination: Her general condition was very poor. Pallor was marked. Anaemia ++, Cyanosist—nil, jaundice—absent, Pulse—120/min., B.P.—100/80 mm Hg. Heart and lungs—no abnormality.

Abdomen was found to be distended, flanks were full, marked on the left side. Muscle guard was present. Evidence of free fluid in the peritoneal cavity was present. Left iliac fossa was very tender. Uterus-28 weeks' size. Contour of the uterus was outlined. Foetal parts could not be felt definitely. FHS—not heard. Peristaltic sounds were present (8/min).

On vaginal examination, cervix was tubular and os was closed. There was no bleeding per vaginam.

Investigations: Blood: Hb—7 gm%, W.B.C.—8,000/c.mm., poly—65%, lympho—26%, eosino—8%, mono—1%. Urine: no abnormality. Skiagram of the abdomen, foetal shadow within the contour of the uterus.

Laparotomy was decided upon on the provisional diagnosis of intraperitoneal haemorrhage of unknown etiology.

On opening the abdomen, the peritoneal cavity was found to be filled with blood and clots in excess of 1200 ml. The uterus was intact and normal in appearance. The baby was quickly delivered by lower segment caesarean section. After exploration of the other viscera, a small, bluish raw area of 1 cm diameter was detected on the posterior surface of the left infundibulopelvic ligament near its attachment to the fallopian tube. Although the area was not found to be bleeding, it was repaired by two catgut stitches. Marked varicosity of the pelvic veins was noted. The diagnosis after laparotomy was made as massive intraperitoneal haemorrhage due to rupture of varicose veins of ovarian plexus.

Postoperative period was uneventful. She was transfused 900 ml of whole blood. The patient was discharged 10 days after the operation.

Discussion

Balz (1961) noted that haemorrhage from utero-ovarian venous plexus may occur during pregnancy or during labour and puerperium. In the former the haemorrhage is free in the peritoneal cavity causing shock of unexplained origin, while in the latter, a haematoma forms causing much difficulty in arriving at an accurate diagnosis. The case reported here falls in the former group.

The cause of rupture of the ovarian or utero-ovarian veins during pregnancy is speculative. But marked varicose changes in these veins in the vicinity of the haemorrhagic site is a common event as has been found in the present case. The marked varicosity is caused by high rise of pressure in the uterine vein during pregnancy Burwell (1938), and atrophy of the muscular coat of the vessels with connective tissue replacement Samuelsen (1954). Incomplete regression during the puerperium leads to progressive fragility of the veins with each additional pregnancy. Notkovich (1956) pointed out occasional association of this haemorrhagic complication of pregnancy with anomalous pattern of the ovarian-renal vascular system.

Some form of stress seems to be the immediate cause of haemorrhage from varicose pelvic veins in case under discussion, who was multiparous and carrying 28 weeks of pregnancy. Although the patient had no history of constipation or chronic cough, mere household work like regular lifting of 4-year-old child, carrying buckets of water and grinding of spices on stone piece in a squatting posture, all helped to initiate the haemorrhagic episode.

As the patient was coming from a distant village and was hospitalised late in shock due to long continued intraperitineal haemorrhage, causing intrauterine death of the foetus. Extraction of the foetus from the uterus helped to approach the bleeding point most readily.

The prognosis in this case has been found to be better and the recovery after the operation was uneventful as the haemorrhage occurred during pregnancy and not during labour or puerperium. Similar comments were also made by Balz (1961) earlier. As regards the recurrence of this serious complication in subsequent pregnancy we are in the dark as the literature is lacking. Follow up of the patient in next pregnancy is necessary.

Summary

An uncommon case of intraperitoneal haemorrhage from pelvic varicosities during pregnancy is presented. The possible etiological factors of rupture of

these veins, difficulty in diagnosis, prognosis and treatment of the case have been discussed.

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