SPONTANEOUS RUPTURE OF UTERUS DURING PREGNANCY

(Report of 2 Cases)

by

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Spontaneous rupture of the normal uterus during pregnancy without preceding trauma or scar is exceedingly rare obstetric emergency. Only in 15% cases rupture of the uterus occurs during pregnancy before 36 weeks, whereas in 85% calamity is seen during labour (Sitaratna, 1975). Antenatal patients with rupture uterus may report late as hemorrhage, pain and collapse may not occur and the diagnosis may thus be delayed. We had 2 cases who came 5 and 7 days after rupture of the uterus with clinical features of intestinal obstruction, which are being reported because of rarity.

Case 1

Patient. Ph. W. 40 years, 6th gravida P5 + O, was admitted to maternity ward, Medical College Hospital, Rohtak as emergency on 10th January, 1974 with 35 weeks' amenorrhoea and loss of foetal movements for 5 days. She had vomiting, gradually increasing abdominal distension and constipation for 4 days and slight bleeding per vaginum for 1 day. She denied any history of trauma, pain or drug intake prior to these symptoms. She had 5 full term normal deliveries at home, last being 4 years ago. She denied any history of D & C or manual removal of placenta.

On Examination: Patient looked pale. Pulse 110/min. regular, and of good volume. Temp. 104°F BP 140/95 mm of Hg. Respiration 20/min. No oedema feet.

Abdominal examination revealed tenderness and marked distension with loops of distended gut in upper abdomen. Uterine outline was not made out and presentation and position of foetus could not be ascertained. FHS absent.

Pelvic examination: Cervix 2 finger loose. No foetal parts could be felt in the uterine cavity.

Investigations: Blood Hb. 6.5 G%, Urine NAD. Blood group 'O' Rh +ve. X-ray abdomen showed multiple fluid levels and foetus lying transversely in abdomen with head towards right iliac fossa.

At laparotomy there was old blood in the peritoneal cavity. There was complete fundal rupture nearly 3" in diameter. Baby and placenta were lying in peritoneal cavity without attachment to any structure. Macerated male baby weighing 7 Lbs. and placenta were removed and total hysterectomy was done. Patient received 2 units of blood during the procedure.

Post-operatively patient had rise of temperature from 100° to 104°F for 5 days. Her distension persisted for 2 days and she had chest infection. She responded to appropriate antibiotics and supportive therapy and was discharged in good condition on 14th day.

Case 2

Patient Chh. 35 years, 7th Gravida P6 + O, was admitted as an emergency on 25th January, 1975 with history of amenorrhoea for 37 weeks and loss of foetal movements along with distension of abdomen for 7 days. She started having pain in the abdomen along with slight vaginal bleeding 7 days ago. Bleeding stopped after 2 days but distension and discomfort abdomen continued. She gave history of vomiting for 2 days prior to admission.

She had 4 full term and 2 premature deliveries at home, last childbirth being 2 years ago. She denied history of any intrauterine manipulations.

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On Examination: Patient looked pale and ill. Pulse 130/min. B.P. 110/65 mm Hg.

Abdominal examination: Marked distension was present. Foetal parts were felt superficially. Uterus was felt separate and contracted, of about 16 weeks' size. FHS absent.

Pelvic examination: Cervix admitted one finger. Uterus was 14-16 weeks size and cavity felt empty.

Investigations: Blood—Hb. 7.0 G%, Urine NAD.

At laparotomy old blood stained fluid escaped from peritoneal cavity. Gut was distended. There was rupture of the fundus of the uterus extending to posterior wall. Macerated baby and placenta were removed from peritoneal cavity. Omentum was angry looking. Repair of the uterus was carried out along with bilateral tubectomy.

Postoperatively patient remained afebrile but had urinary tract infection due to E. coli sensitive to furadantin. She had leucocytosis ranging from 28000 to 30000/cumm. She was discharged in good condition on 18th day.

Comment

In the present communication, rupture of the uterus occurred at 35th and 37th week of pregnancy without any evidence of onset of labour. Both patients were grand multiparas and reported 5 and 7 days after rupture with clinical features suggestive of intestinal obstruction and neither had pain, hemorrhage, or collapse suggestive of rupture uterus. Fundus was the site of rupture in these cases, although in second case it was extending to posterior wall of the uterus in addition. There was no history of previous trauma as manual removal of placenta. Various postulations have been put forward to account for spontaneous rupture during pregnancy. Hyaline degeneration of uterine myometrium with increasing age and parity may be causative factor (Armytage, 1913; Kane, 1926). Inherent weakness and developmental defects of the myometrium at the site of fusion of Mullerian ducts have also been held responsible (Kasturi Lal and Kawthekar, 1973). Trophoblastic invasion of myometrium leading to rupture was postulated by Waters (1934).

Increased fibrosis and thinning of uterine wall found in multiparas may predispose the uterus to rupture. Felmus *et al* (1953), in a review of 121 cases of spontaneous rupture of intact uterus, suggested the possibility of an undetected incomplete rupture of uterus in previous pregnancies in addition to trauma and sepsis. Since infection and trauma occur more often in multiparas, spontaneous rupture of the uterus during pregnancy also is more likely to occur in these patients. In the present 2 cases, grandmultiparity seems to the only factor to which rupture of the uterus may be attributed.

Summary

Two cases of spontaneous rupture of uterus at 35 and 37 weeks of pregnancy in grandmultiparas without preceding history of trauma are reported. Both had fundal rupture and presented 5 and 7 days after the incident with features of intestinal obstruction.

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