OCCULT RUPTURE OF UTERUS DURING THIRD TRIMESTER OF PREGNANCY

(Two Case Reports)

by

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Spontaneous rupture of the intact uterus during pregnancy is extremely rare. Some patients are prone to such an accident by virtue of the fact that their uteri have been damaged by unrecognised trauma like, manual removal of placenta or instrumental evacuation.

At the Government Maternity Hospital, Pondicherry, there were 94 cases of rupture of uterus from January 1971 to December 1975. In only 2 cases the rupture occurred during pregnancy. They are presented not only for their rarity, but also for the simple reason that in future we are likely to face similar problems because of the rising incidence of post M.T.P. pregnancies.

Case 1

Mrs. J. aged 27 years, para 5 + 0, gravida 6 was admitted to the antenatal ward on 7-8-75 at 9.25 A.M. as a case of pregnancy with severe anaemia and vague abdominal pain. She had amenorrhoea of 7 months' duration. She experienced severe pain in the back about 20 hours prior to admission while grinding rice. There was history of vomiting at the time of onset of pain and she was constipated. There was no history of bleeding P/V at any stage of the present pregnancy. Obstetric history revealed that the patient had eclampsia during her first pregnancy; she had retention of placenta following 4th and 5th deliveries for which manual removal had been performed.

On examination, patient appeared pale, her pulse was 100/minute and blood pressure 110/70 mm. Hg. Uterus was 32 weeks size of pregnancy and moderately tender, foetus presented by vertex and foetal heart sounds were absent. There was no evidence of free fluid in the peritoneal cavity. On pelvic examination, cervix was not taken up, os was one finger loose, membranes were intact and vertex was above the brim. Except for hemoglobin of 6 gms% all the investigations were within normal limits. Plain X-ray abdomen showed a foetus presenting by vertex; no pathology could be detected.

Provisional diagnosis of concealed accidental haemorrhage was made and an A.R.M. was performed at 7.45 p.m. and clear liquor was drained. The same day her general condition deteriorated with increasing tachycardia, hypotension and uterine tenderness. However, there was no increas in fundal height or the abdominal girth. Resuscitatory measures were adopted including blood transfusion. Even after 8 hours the patient did not go into labour and hence a syntocinon drip was started with no response. Though the patient's blood pressure and urine output were satisfactory, tachycardia and pallor

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increased and it was decided to perform a laparotomy.

On opening the abdomen, old clotted blood had collected under the diaphragm. There was a rupture of 6 cms. on the posterior aspect of the upper segment just overlying the placental attachment. A dead male baby weighing 1.5 kg. was delivered through a classical incision and placenta was removed very easily. Total abdominal hysterectomy was performed in view of the fact that the edges of the rupture were oedematous and necrosed.

In the postoperative period patient had abdominal wound and vault infection which was treated with appropriate antibiotics and she was discharged from hospital on 20th postoperative day in good condition.

Case 2

Mrs. I, aged 25 years, Para 1 + 1 Gravida 3 was admitted on 9-1-76 at 7.15 p.m. with complaints of amenorrhoea of 10 months' duration and pain in abdomen since 8 a.m. the same day. The pain was dull in character, localised mainly to left iliac fossa. There was no history of vomiting or constipation. There was no history of bleeding P/V at any stage of the present pregnancy. She had one full term normal delivery 5 years back; her second pregnancy ended in an instrumental evacuation at 6 months of gestation for missed abortion.

On examination, her general condition was fair, no pallor, pulse 96/minute; blood pressure 120/80 mm. Hg. Uterus was full term, not contracting, foetus presented by vertex and foetal heart sounds were good. On pelvic examination cervix was not taken up, os was 2 fingers loose, membranes intact, and the head was at the brim. Pelvis seemed adequate. She was kept under observation. About 9 hours after admission foetal heart sounds disappeared suddenly. Her general condition remained the same. Pelvic examination revealed that the presenting part had receded and an oblique rent was detected on the posterior aspect. A diagnosis of rupture uterus was made and a laparotomy was performed.

At laparotomy, there was an oblique rent on the posterior aspect about 15 cms. in length extending from left cornu to the internal os. Foetus with intact membranes and placenta was lying in the peritoneal cavity . There were only few millilitres of free blood. In view of the rent being clean cut it was repaired in layers. Sterilisation was not performed as she had only one living child. She was treated with appropriate antibiotics for postoperative infection and was discharged on 22nd postoperative day.

Discussion

There is no evidence from history and physical examination that labour had set in either of the cases when the uterus had ruptured. The rupture must have occurred in the first case when the patient experienced acute pain in the back while grinding. In the second case it can be correlated with onset of pain in left iliac fossa. The absence of bleeding per vaginum is a remarkable feature against the diagnosis of rupture of uterus in both the cases. In the second case particularly, the absence of pallor, and marked uterine tenderness is also unusual. Evidence of free fluid could not be obtained in the first case because of the clotted blood accumulated under the right diaphragm. In the second case even at laparotomy only few millilitres of blood were seen in the peritoneal cavity. In both the cases there was a history of unrecognised obstetrical trauma in the form of manual removal of placenta in the first case and instrumental evacuation for missed abortion in the second.

Rupture of an unscarred uterus during pregnancy or early labour is rare. From review of literature, it has been found that about 85% of ruptures occur during labour and 15% before 36 weeks of pregnancy (Sitaratna, 1975). In this hospital also, out of 94, 92 occurred during labour.

In this study both the patients were in third trimester of pregnancy. In the cases reported by Lakshmi Bai (1970), Kasturi Lal and Kawthekar (1973), Walvekar *et al* (1975) and Sitaratna (1975), the duration of pregnancy ranged from 18 to 28 weeks. Bannerman (1965) has record-

ed a case of spontaneous uterine rupture at 34 weeks of gestation. The foetus along with membranes was lying in the peritoneal cavity as was also noted in our second case.

The area of rupture in both our cases was in the body of the uterus. Felmus *et al* (1953) found in their study that the lacerations were mostly in the corpus of the uterus whenever rupture occurred prior to labour. Similar observation was made by Margulies and Crapanzano (1966) in one of their cases.

With the advent of M.T.P. the incidence of pregnancies with unrecognised previous obstetrical trauma is on the increase. Consequently obstetricians are likely to face catastrophies like occult rupture of the uterus. Adding to the diagnostic problems the history of Medical Termination of Pregnancy may not be available in all the cases. High index of suspicion of rupture of uterus will go a long way in the proper management of any patient coming with unexplained abdominal pain during pregnancy.

Summary

1. Two cases of occult rupture of uterus during third trimester of pregnancy have been presented.

2. Diagnostic difficulties have been discussed due to unusual clinical manifestations of the cases.

3. Literature has been reviewed with reference to the subject.

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