SPONTANEOUS RUPTURE OF THE UTERUS IN A PRIMIGRAVIDA IN SECOND TRIMESTER OF PREGNANCY

(A Case Report)

by

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Introduction

Spontaneous rupture of the uterus is exceedingly rare. There is a group of patients who are potential candidates for rupture by virtue of the fact that their uteri have been damaged by unrecognised obstetric trauma, e.g. perforation, vigorous curettage, infection or deep cervical laceration.

We are reporting a case of what we believe to be a true spontaneous rupture of the uterus where abovementioned factors could not be identified even on detailed enquiry.

CASE REPORT

Mrs. L. D., 25 years old, primigravida, complained of pain in the abdomen at 6 p.m. on 22-4-1973. She gave history of 4½ months' amenorrhoea with pain in the abdomen and attacks of giddiness. There was no history of trauma, accidental fall or interference during pregnancy and no oral drugs and no oxytocic injections were given. There was no history of previous curettage or any other vaginal manipulation in the past or during this pregnancy.

On examination, her pulse was 140 per minute. There was marked pallor and blood pressure was 140/70 mm. of mercury.

Abdominal examination revealed distension of abdomen and evidence of free fluid.

Vaginal examination showed that the cervix was downwards and backwards, long and not taken up, both external and internal os were closed. There was no bleeding per vaginam. The uterus was bulky and about 12 weeks' size and a tender mass of 2″ x 2″ was palpable in the right fornix. Cervical movements were excruciatingly tender.

Diagnosis of ectopic gestation was made and colpopuncture was done which was positive.

Exploratory laparotomy was performed and the findings were as follows: The peritoneal cavity was filled with about 2 litres of blood. The foetal sac was seen to protrude from the anterior surface of the uterus in the upper segment. The foetus was lying free in the peritoneal cavity and was 18 weeks' in size. The foetus and the placenta were removed easily and completely. There was no evidence of adherent placenta. The uterus corresponded to the period of amenorrhoea. It showed a vertical tear about 2½″ long on the upper segment in the midline similar to a classical caesarean section scar. The bladder was intact. The edges of the rupture were freshened and the scar sutured in three layers.

Post-operative period was uneventful. The histopathological report of the tissue at the site of rupture showed no abnormality.

Discussion

Spontaneous rupture of an intact uterus is not uncommon during labour, there

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being various causes like multiparity, cephalopelvic disproportion and contracted pelvis or use of an oxytocic drug, etc. But these factors do not operate in the second trimester and a spontaneous rupture of a uterus in the second trimester is very rare. As mentioned earlier, undiagnosed previous obstetric trauma may be an etiological factor.

Review of literature shows that Pedovitz (1958) has reported four cases of rupture in the second trimester. His cases were as follows: In one case rupture occurred at the site of previous cervical resection, in the second rupture occurred in the rudimentary horn of a bicornuate uterus, and in the other two cases rupture occurred as a result of erosion of myometrium due to chorioadenoma destruens.

Together with Felmus (1953) he has reported 121 cases of spontaneous rupture of apparently normal uterus including the above four cases.

Another case is reported by Carsten in 1964 of a rupture occurring in a 4 months' size uterus. This patient had undergone a curettage 2 years ago for the diagnosis of ectopic gestation. The pathology of the ruptured site showed endometriosis and placenta accreta. Placentation in the area of endometriosis was thought to be the underlying cause for perforation.

One very unusual case was reported by Fahmy and Ahmed (1965). The patient was a grand multipara who had last delivery 5 years ago. She gave history of 5 months' amenorrhoea with pain in the abdomen and bleeding per vaginam. Patient recovered and was asymptomatic for 2 years. Then she developed vaginal discharge and on exploration there was a rupture of the uterus with mummified foetus and the placenta was absent. There was fixation of the uterus to the pouch of Douglas and rupture occurred in the anterior wall. It was regarded that the rupture in the anterior wall was due to a fixed retroverted uterus with sacculation and thinning of the anterior wall and grand multiparity.

In our patient, however, we could not find any cause for the rupture. Patient was a primigravida and desirous of having a child and that rules out any criminal interference. She gave no history of trauma. The placentation was on the posterior wall and there was no evidence of placenta accreta. She had had no previous operations either vaginal or abdominal. The only positive finding was that the rupture was in the midline which may offer an explanation of inherent weakness of the musculature at the site of joining of the two Mullerian systems. Individual susceptibility and general muscular weakness in pregnancy is offered as another explanation.

Summary and Conclusion

A case of spontaneous rupture in a primigravida in the second trimester is reported and the causes of rupture in the second trimester are evaluated.

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