

## A CASE OF FUNDAL RUPTURE OF THE UTERUS IN THE SECOND TRIMESTER OF PREGNANCY

by

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### Introduction

Rupture of the uterus during pregnancy is a rare accident, though rupture of the uterus in labour is not uncommon. Rupture of the uterus during pregnancy is divided into spontaneous and traumatic. Traumatic may be due to direct or indirect injury to the uterus. Spontaneous rupture usually occurs due to yielding of previous scar on the uterus, due to caesarean section, previous rupture, myomectomy, surgery for inversion of uterus, thinning of the uterine wall from manual removal of the placenta, a malformed single or double uterus, and hydatid mole. Usually during labour the lower segment gives way. During pregnancy, the rupture is usually in the upper segment.

The incidence of rupture uterus during labour varies from one in 93 to one in 11,000 cases. In Government Kasturba Gandhi Hospital for Women and Children, Madras during the ten year period from 1962 to 1971—there were 86 cases among 1,42,143 deliveries, giving an incidence of one in 20,000 deliveries. There were only 2 cases of rupture during pregnancy. An unusual case of fundal rupture of the uterus in the early mid-trimester of pregnancy is presented here.

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### CASE REPORT

35 years old woman—10th gravida was admitted on 10th October, 1971 at 3.45 P.M. with a history of 4 months' amenorrhoea and dyspnoea since morning. Patient denied history of interference of pregnancy. Patient was not sure of the date of her last menstrual period. Menstrual cycles were regular occurring once in 30 days lasting for 5-6 days. She had 8 full term normal deliveries with good spacing and 4 live children. Ninth pregnancy was a premature delivery at 7th month for which she had manual removal of the Placenta one year ago, in this hospital.

Her personal and family history were insignificant.

### On Examination

Patient was severely anaemic and dyspnoeic, with pulse rate 82 per minute and blood pressure 100/70 mm of Hg. Examination of cardiovascular and respiratory system revealed no abnormality.

### Abdominal Examinations

Abdomen was soft and not distended. Liver and spleen were not palpable. There was tenderness and slight guarding of the lower abdomen. Uterus was enlarged to about 18-20 weeks size. Foetal parts were not clearly palpable. Foetal heart sounds were not audible. There was a suggestion of shifting dullness.

### Vaginal Examination

Cervix was not taken up, os closed and uterus 18-20 weeks size. There was fullness in both the fornices but no tenderness on moving the cervix. There was no bleeding per vaginam.

At 4.30 P.M.: The patient suddenly collapsed, pulse and blood pressure were not recordable and limbs were cold and clammy. Patient

became very pale. Case was seen by the Chief and the following condition was noted.

Abdomen was distended—suspected intra-peritoneal bleeding. On bimanual examination cervix was pointing downwards and forwards. Exact size of the uterus was not made out. Os was closed. No vaginal bleeding, no tenderness; fullness in the fornices present. Diagnosis of ruptured ectopic was made. After starting the preliminary resuscitative measures, a diagnostic needling of the Cul de sac was done and altered blood was withdrawn. Immediate laparotomy was decided.

Laparotomy was done under local anaesthesia supplemented by gas and oxygen. On opening the abdomen by transverse incision, the peritoneal cavity was full of blood. A foetus 18-20 weeks with the sac was lying free in the abdominal cavity and was removed.

The uterine fundus was the seat of a rupture about  $\frac{3}{4}$  inch away from the cornual ends. Both cornual ends were free. The tear was extending to about an inch posteriorly. On the right side placental tissue was situated posteriorly and was also attached to the site of rupture which was removed, edges were trimmed and uterine wound was sutured in layers. Sterilization by modified Pomeroy method was done. After obtaining perfect haemostasis, abdomen was closed in layers. The post-operative blood pressure was 100/80 mm of Hg.

Patient had 3 bottles of 'O' group blood pre-operatively on the table and was put on Achromycin postoperatively for 7 days. Except for a slight irregular fever, her postoperative period was uneventful.

Patient was discharged on the 12th post-operative day in a complete normal state of health.

#### Discussion

It is often difficult to say exactly when the uterus ruptures. It is a well recognised fact that rupture of the uterus may occur during pregnancy, during normal labour and during or following a protracted labour. Rupture during pregnancy

is rare. Presence of a weak classical caesarean scar is the commonest predisposing condition during pregnancy. From review of literature, it has been found that 83.3% of ruptures occur during labour and only 16.7% of these occur before 36 weeks.

There is literature on rupture of the uterus after the child has become viable. Repeated attention is stressed on the prevention, diagnosis and treatment of rupture of the gravid uterus in the third trimester. But rupture during second trimester has been reported only rarely. Felmus *et al*, (1953) in a complete review were able to find only 116 cases to which they added 5 of their own. Most authors stress on increased age and parity of the patient. This fact is also stressed by Munro-Kerr and Chassar Moir who claim this to be due to the increasing fibrous tissues in the uterine muscle subsequent to each pregnancy.

This patient is also a grand multi with a previous history of manual removal of placenta. The possibility of a placenta accreta is strong but sincere hysterectomy was not performed, the study of the specimen could not be done.

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#### References

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2. Felmus, L. B., Pedowitz, P. and Nassberg, S.: Obst. & Gynec. Survey. 8: 155. 1953.

See Fig. on Art Paper VI