

# SPONTANEOUS FUNDAL RUPTURE OF THE UTERUS DURING PREGNANCY

(A Case Report)

by

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Spontaneous rupture of a normal uterus before the onset of labour is an exceedingly rare Obstetrical emergency. The diagnosis is often missed until the condition of the patient becomes critical and valuable time is lost leading to high maternal mortality.

## CASE REPORT

Mrs. X, aged 26 years was admitted at Irwin Hospital on 13-10-74 at 5 p.m. with the history of 30 weeks amenorrhoea, pain in abdomen and loss of foetal movements since 12-10-1974. There was no history of Vaginal bleeding.

### Obstetrical History

Married for 6 years, had 2 full term normal deliveries, last delivery 4 years ago. Third stage was uneventful in both the pregnancies.

### Menstrual History

Regular, 3-4/28-30 days cycles.

L.M.P. 1st March, 1974, E.D.D., 8th Dec. 1974.

### Past History

Nothing significant. There was no history of abortion, curettage or manual removal of placenta.

On admission patient was anaemic, tongue moist, pulse 100/min., BP 130/70 mm of Hg., no oedema feet. Systemic examinations revealed no abnormality except tachycardia. The uterus was enlarged to 30-32 weeks size of pregnancy,

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vertex presentation and F.H.S. absent. Tenderness present all over the uterus and no definite uterine contractions were felt. On vaginal examination cervix was found to be multiparous admitting one finger small vertex felt above the brim. No vaginal bleeding or leaking. Provisional diagnosis of accidental haemorrhage was made and patient was put on conservative line of treatment.

### Laboratory Findings

Haemoglobin 9 gm%, Total count. 7000/cm, Differential count poly 70%, lympho 30%, Blood urea 24 mg%, Clot retraction time, bleeding time, clotting time within normal limits. There was no albumin or sugar in the urine.

At about 11 a.m. on 14-10-74 patient complained of excessive pain in abdomen. Pulse went up to 130/min., blood pressure was 120/80. She was looking ill, foetal parts not felt clearly, there was abdominal distension and vague tenderness all over the abdomen. Blood sent for grouping and cross matching. Repeat Haemoglobin was 7.5 gm%, X-Ray abdomen showed single foetus with vertex presentation. At 3.30 p.m. pulse went up to 136/min., Temp. 38°C, abdominal girth increased by one inch. Bowel sounds sluggish. She was put on I/V drip, Ryles tube suction was started and antibiotics were given. Surgeon was consulted. She was advised to continue the same treatment.

On 15-10-75 morning she had vomiting twice, pulse was 108/min. no change in abdominal girth, conservative treatment with suction, I/V drip and antibiotics was continued.

On 16-10-75 definite distension of upper abdomen was noted, patient did not pass flatus and she was looking ill. Pulse was 110/min, B.P. 110/70 mm/Hg, abdominal distension increased by 1½" since admission, and uterine outline not



well defined. Bowel sounds were sluggish. A 2nd X-ray of abdomen was taken which showed multiple fluid levels and no gas under the diaphragm. Repeat vaginal examination was done, Cervix was hanging loose, presenting part was high up and could not be made out. There was tenderness in all the fornices. Laparotomy was decided since condition of the patient was deteriorating.

#### Laparotomy Findings

Abdomen was opened by midline incision. There was free blood approximately 200-300 cc. in the peritoneal cavity. Foetus with the intact amniotic sac and placenta was lying in the peritoneal cavity with a transverse tear at the fundus from one tube to the other tube. Subtotal hysterectomy was done. Bowel loops were distended, an attempt to deflate the bowel was made. Abdomen was closed in layers. Patient was given one unit of blood transfusion during operation. Baby weighed 1.6 kg., macerated. Weight of placenta 600 gms.

Macroscopic examination of subtotal hysterectomy. Uterus, 10 x 10 x 6 cm. in measurement. The fundus showed transverse ruptures 6 cm. long with ragged haemorrhagic margin. Myometrium was thick and vascular. Endometrium dark brown and shaggy, more so near the site of rupture.

#### Post Operative Period

Patient continued to have fever and abdominal distension but responded to suction, I.V. fluids and Garamycin. Abdominal stitches were removed on 10th day and union was good. Patient was discharged on 14th Postoperative day.

#### Follow Up

Patient came for follow-up after 4 weeks and was found to be normal.

#### Discussion

The largest collection of spontaneous rupture of apparently normal uterus is by Felmus and Redowitz (1953). Spontaneous rupture during pregnancy occurs at the fundus as in the reported cases. In majority of cases typical symptoms are obscure and indefinite and diagnosis is often missed or delayed. Suspicion of rupture uterus should be made in a pati-

ent complaining of pain in the abdomen, unexplained tachycardia and loss of fetal movements.

Spontaneous rupture of uterus during pregnancy has been attributed to hyaline or fatty degeneration in the uterine musculature or it has been found to be associated with uterine malformations. Gillman *et al* (1947) produced experimental evidence that rats fed on certain deficient diet became more liable to rupture uterus. They think nutritional factors may be of importance in causing rupture uterus in some women. Menon (1962) suggested that there is no aetiological factor; an inherent or acquired weakness of the uterine musculature, as a part of general malnutrition and protein deficiency common to pregnancy may play a significant part.

#### Summary

An unusual case of spontaneous rupture of uterus at 32 weeks of pregnancy with atypical clinical features which presented as emergency has been reported. Histopathological report showed no pathological change. Probable cause of rupture may be nutritional deficiency as suggested by Gillman's (1947) and Menon (1962).

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#### References

1. Felmus, L. B. and Pedowitz, P.: *Obst. & Gynec. Survey*, 8: 155, 1953.
2. Gillman J., Gilbert G. and Gilman, T. S.: *S. Afr. J. Med. Sci.* 12: 153, 1947.
3. Menon, M. K. K.: *J. Obst. & Gynec. Brit. Emp.* 59: 18, 1962.

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