

FUNDAL RUPTURE OF THE UTERUS—ANALYSIS OF 10 CASES

by

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Introduction

Of all the types of rupture of the uterus, fundal rupture is very uncommon. Rupture uterus is commonly found during labour with an abnormal presentation or in C.P.D. or in grand multi, even late in pregnancy. Silent fundal rupture at any time during pregnancy before labour is not uncommon with previous upper segment caesarean section scar, hysterotomy and in a thin myometrium either congenital or due to repeated vigorous curettage and in placenta percreta. In majority of cases, the diagnosis is often missed because of obscure clinical symptomatology and valuable time is lost leading to high maternal mortality and morbidity. Very rarely, silent fundal rupture can occur due to external violent injury as in case of motor accidents.

Material

Ten cases of Fundal rupture collected retrospectively from the laparotomy findings in a five year study period from January 1976 to December 1980 at Government Raja Mirasdar Hospital, Than-

javur. The data collected from the hospital records were analysed in details.

Results

Incidence

Total number of deliveries for the past 5 years in our hospital was 28457. There were 165 cases of rupture of the uterus giving an incidence 1 in 172. Out of total cases of rupture incidence of fundal rupture was 7.57%.

Age and Parity

All the cases of fundal rupture fall into the reproductive age group between 21-32 years. Seven cases (70%) were multiparas and 3 (30%) in primigravidas. Two out of 3 primigravidas, were nearing 30 years with long period of infertility and had investigation for infertility like D & C.

Ante-Natal Check-up

All cases were unbooked. Six cases were referred from outside as there was no progress.

Pre-operative Diagnosis

Pre-operative diagnosis is shown in Table I. Out of 10 cases, only in 4, diagnosis of rupture was made pre-operatively. Among 4, 2 were old rupture of 3 days and 7 days with peritonitis and 2 were fresh ruptures. In 3 cases, a clinical

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TABLE I
Pre-operative Diagnosis

	No. of Cases	Percentage
1. Rupture uterus	4	40%
2. Secondary abdominal pregnancy	3	30%
3. I.U. Death	2	20%
4. Labour pain	1	10%
Total	10	100%

and radiological diagnosis of secondary abdominal pregnancy was made and only on laparotomy, a correct diagnosis of fundal rupture was made. Two cases were diagnosed as intra-uterine death and only 1 case was diagnosed as labour pain. In all fundal rupture was a surprise findings on laparotomy.

Presenting Symptoms (Table II)

TABLE II
Presenting Symptoms

Main Symptoms	No. of cases
1. Abdominal pain	6
2. Labour pain	4
3. Loss of fetal movements	4
4. Vomiting	3
5. Vaginal bleeding	2
6. Something given way	1

In majority of the cases, pain in abdomen, either vague or labour pains, was the main symptom. Eventhough, in all, the fetus was dead, only 4 cases (40%) came with a history of loss of fetal movements. Only 1 case was intelligent enough to complain that something gave way.

Causes

Causes of Fundal Rupture is shown in Table III. In this series, fundal attachment of placenta was the main cause, next

TABLE III
Causes

Causes	No. of cases	Percentage
1. Fundal attachment of placenta	3	30%
2. Spontaneous	3	30%
3. Induced abortion & D & C	2	20%
4. Congenital anomaly	1	10%
5. Combination (Placenta Percreta & Previous H/O D & C)	1	10%
Total	10	100%

comes the spontaneous (30%). In 3 cases, syntocinon drip was given, in 2 for induction of labour for a mistaken diagnosis of intra-uterine death and in the other to accelerate the labour, as the Medical Officer considered the case to be of uterine inertia. In all the syntocinon drip were given outside the institute. In 1 case, an elderly primigravida, a combination of causes were found i.e., fundal placenta and previous history of D & C for infertility.

Treatment and Mortality

Seven cases had hysterectomy, 6 total and 1 sub-total. In 2 cases, repair of rent was done as the patient were primigravida. In 1 case laparotomy and closure with drainage alone was done, because the rupture was old with plastered adhesions and peritonitis. The same case died on the second post-operative day.

The complications are not many except wound infection. In 1 case, fecal fistula developed which was treated with ileo-ileostomy and the case was discharged well. Only 1 case died among the ten cases, giving a mortality of 10%.

Discussion

Rupture of the intact uterus during pregnancy usually occurs at the fundus. There are some sporadic case reports now and then. But the largest collection of spontaneous rupture uterus in normal pregnancy is made by Felmus and Pedowitz (1953). The typical symptoms of rupture are obscure and indefinite in majority of cases. There is always difficulty in diagnosing it, leading to a number of different pre-operative diagnosis. Nirmal Gulathi (1979) had 2 cases of fundal rupture with a pre-operative diagnosis of intestinal obstruction complicating pregnancy. Suspicion of rupture uterus during pregnancy should be kept in mind in a patient who complains of vague chronic pain in abdomen with loss of fetal movements and with unexplained tachycardia (Kotwani *et al*, 1977).

Rupture of the uterus during pregnancy is extremely rare in primigravida. Felmus and Pedowitz (1953) found 12 primigravida in 121 cases. In this series, 3 out of

10 cases occurred in primigravida (30%). It is very high compared to previous study.

Conclusion

One should always suspect fundal rupture in a patient who complains of vague pain in abdomen during IInd or IIIrd trimester of pregnancy. Every effort is made to diagnose and to treat the condition early, otherwise it will lead to high maternal mortality and morbidity.

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References

1. Felmus, L. B., and Pedowitz, P.: *Obstet. Gynaec. Surv.* 8: 155, 1953.
2. Gulahi, N.: *J. Obstet. Gynaec. India*, 29: 1962, 1979.
3. Kotwani, B. G., Sood, M. and Mukerjee, N.: *J. Obstet. Gynaec. India*, 27: 266, 1977.