

AN ANALYTICAL STUDY OF RUPTURE UTERUS

by

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Rupture of the pregnant uterus is one of the serious complications arising before or during labour. Nowadays, every effort is being made for efficient ante and intra partum care at P.H.C. and even at subcentre level. Still a number of cases are brought to this hospital in very low general condition after being badly handled at village level. Practically all are infected and anaemic. The place is hilly so the approach is also not very easy and patients are brought from long distances in any type of transport available after hours in labour.

Material and Method

A total of 13,213 deliveries were conducted at Zanana Hospital attached to R.N.T. Medical College, Udaipur from 1974 to 1978. There were 77 cases of rupture uterus during this period, giving an incidence of 1 in 171.5. All were emergency admissions except 1 and 72 out of 77 were from rural area.

Forty-four cases were between the age group of 21-30 years, 4 were below 21 years, and 29 were above 30 years of age.

Four were nullipara, 13 primipara, 18 para 2 and rest 42 were para 3 and above.

Forty-five cases were admitted in collapsed condition and of the rest 32 also many were on the verge of shock.

In 50 of the 77 cases Hb level was below 8 gm% and it was below 6 gm% in 29 cases. Most of them got only one unit of transfusion.

Causes of Rupture

Transverse lie with impacted shoulder presentation was the commonest cause of rupture, 28 cases (36.36%). Brow was the cause in 4 cases, mentoposterior in 2, and parietal presentation in 1 case. Of the 4 cases of scar rupture, cause was previous classical caesarean in 2, rent repair in 1 and lower segment caesarean in 1 case. In the traumatic rupture cause was forceps in 1, internal podalic version in 2 and craniotomy in 1 case.

Of the 71 cases who underwent surgery, complete rupture was found in 61 cases and incomplete rupture in 10 cases, site of rupture was lower segment in 65 cases and upper segment in 6 cases.

Management

Hysterectomy was the operation of choice in 64.93% cases (Table II). Bladder was repaired in 8 of these cases. 27.27% cases had repair of rent as such or with sterilisation.

TABLE II
Various Operation done in Rupture Uterus

Type of Operation	No. of cases	Percentage
Repair of rent	15	19.48
Repair of rent with sterilisation	6	7.79
Hysterectomy	50	64.93
Expired before operation	6	7.79

Post-Operative Complications

Fifty-four out of the 77 cases had some

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complication or the other (Table III). Sepsis was the commonest postoperative complication (46.29%).

TABLE III
Showing Percentage of Various Post Operative Complications

Complications	No. of cases	Percentage
Sepsis	25	46.29
Urinary infection	10	18.21
Vesico-vaginal fistulae	9	16.16
Burst abdomen	5	9.25
Lung complications	5	9.25

Maternal Mortality

In all there were 28 deaths (36.363%) in this series. The various causes were haemorrhagic shock 18 cases, septicaemia 4 cases, paralytic ileus 3 cases, pulmonary oedema 2 cases and pulmonary embolism 1 case.

As many as 14 (50%) of the deaths were within 6 hours of admission where hardly any sort of treatment was possible. Seven (25%) cases died between 7 hours to 24 hours, 4 (14.28%) between 24 to 48 hours and 3 (10.71%) died after 48 hours.

Discussion

The incidence of rupture uterus 1:171.5 is quite high in this institution when compared with figures quoted by Menon (1962) as 1:415, Das, R. K. (1969) as 1:475, Gogoi, M. P. (1971) as 1:455, Mitra, R. (1973) as 1:319, Jacob and Bhargava (1973) as 1:305, and Goswami (1979) as 1:580. An incidence of 1:166.6 was reported by Trivedi (1968).

The most vulnerable age group in this series was between the age of 21 to 30 years. Patel and Parikh (1960), Prabhawati and Mukherjee (1963), Jacob and Bhargava (1973), and Oumachigui, A.

(1979) also reported high incidence in the same group. Regarding parity it was high in para 3 and above. In cases below para 3 handling at home, was the chief cause of rupture. Menon (1962) reported average parity for rupture as 4.6, Gogoi, M. P. (1971) as 4.7 and Oumachigui, A. (1979) as 3.5.

Transverse lie presenting as impacted shoulder presentation was the main cause of rupture in this hospital (36.36%). All of them were rural cases who were brought after manipulations at home. Jacob and Bhargava (1973) reported transverse lie as cause for rupture in 41.6% and, Oumachigui, A. (1979) in 45%. Goswami (1979) also reported transverse lie to be the commonest cause for rupture uterus.

Menon (1962) gave incidence for hysterectomy as 79.8%, Gogoi, M. P. (1971) as 86.11%, Oumachigui, A. (1979) as 73.3% and Goswami (1979) as 63.6%. While Jacob and Bhargava (1971) were in the favour of repair operation, hysterectomy was the choice in this series also (64.93%). Hysterectomy was favoured because of long standing irregular, infected tears involving major portion of the uterus, also in some cases due to multiparity. Repair operation was preferred in cases of scar rupture, nulliparae and also in those cases where the low general condition of the patient with nonavailability of blood did not permit major surgery.

The over all death rate of 36.36%, is little less than that reported by Jacob and Bhargava (1971) as 44.2%. But it is quite high than that reported by Menon (1962) as 9.75%, Gogoi (1971) as 27.8%, Oumachigui (1979) as 12%, and Goswami (1979) as 21.21%.

Almost all the cases of this series were handled and infected and postoperative sepsis was detected in 46.29% cases.

Oumachigui (1979) reported sepsis in 44.35% and Jacob and Bhargava (1973) in 42% cases.

The incidence of burst abdomen as reported by Oumachigui (1979) was 3.22% but in this series it was 9.25%. Urinary fistulae developed in 16.66% cases, an incidence of 5.76% was reported by Jacob and Bhargava (1971) and 1 in 33 by Goswami (1979).

Summary

A study of 77 cases of rupture uterus out of 13213 deliveries from 1974 to 1978 has been presented (incidence 1:171.5). All except one were emergency admission. Commonest age group involved was from 21 years to 30 years, and most of the patients were para 3 and above. Transverse lie was the commonest cause of rupture (36.36%). The over all mor-

tality rate was 36.36% and morbidity rate was 70.12%. Hysterectomy was the operation of choice in 64.93% cases.

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