# EMERGENCY HYSTERECTOMY - A 10 YEARS' REVIEW

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#### SUMMARY

A 10 years review of 204 cases of emergency hysterectomy done for various obstetrical indications is presented. Rupture uterus was the commonest indication. Maternal mortality was 6.8% and fetal salvage rate was 18.5%.

#### INTRODUCTION

In no other gynecological or obstetrical surgery is the surgeon in as much dilemma as for deciding about emergency hysterectomy as on one hand it is the last resort to save the mother's life and on the other hand the mother's reproductive capability is to be sacrificed. Many times it is a very difficult decision and requires good clinical judgement. Most of the times the operation is carried out when the condition of the patient is too critical to withstand the risks of anesthesia or surgery, but proper timings and meticulous care may reduce or prevent maternal complications. We present here the analysis of 204 emergency hysterectomies done for obstetrical indications at our Institute during the period 1982 to 1991.

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### OBSERVATIONS AND DISCUSSION

There were total 204 emergency hysterectomies done for obstetrical indications out of 63063 confinements, the incidence being 0.32%. The incidence was slightly higher than that reported by Sikdar and Mandal (1980) and Omachigui & Nayak (1978) of 0.2% each and much higher compared to 0.064% by Pandya and Shah (1987). The higher incidence of our series may be due to the fact that our Institute is the biggest apex referral centre of western Rajasthan draining an arid and desert area with poor referral system and handling of cases by untrained personnel is very common. The means of transportation are also poor due to geographical factors leading to delay in reaching the centre.

The mean age was 30.5 years (range 19 to 45 years), most (87%) being in the 20-35 years age group, majority (69%) from rural

areas. Most (85%) were unbooked and most (86.6%) did not receive any antenatal care. The mean parity was 3.4. Maximum number of cases were para 2-4, the reason for which may be due to the fact that in these cases labour is considered easy compared to first labour and hence there is reluctance to receive antenatal and intranatal care. Delivery is often first tried at home and patient is brought to hospital after complication has occurred. Multiparity is thus important risk factor for emergency hysterectomy. However the number of primipara was also higher in the present series (14%) compared to incidence reported by previous authors of 2.4% (Patel & Parikh, 1960), 4% (Sikdar and Mandal, 1980) and 5.9% (Pandya and Shah, 1987). This reflects lack of proper ante and intranatal care even in primipara in our drainage area.

# INDIVIDUAL CONDITIONS

# Rupture Uterus

Rupture of uterus was the most common indication in the present series (67.2%) similar to that reported by other authors (Omachigui and Nayak 1978, Sotto and Arachambault 1957, Sikdar and Mandal 1980). It is not always necessary to carry out this radical procedure in cases of rupture uterus, repair of the rent may be undertaken at times to ward off the radical procedure. However, in most of our cases, the uterine wall was irregular and edematous and in some cases involving large blood vessels and extending into broad ligament and in many cases there was superadded infection necessitating emergency hysterectomy. This is because many of our cases were mishandeled and there was significant delay in reaching the hospital.

Definite identifiable cause was present in 100/134 cases of rupture uterus. Malpresentation was the most common cause

accounting for 44/134 cases (32.1%), others being oxytocin misuse in 15 (10.9%), rupture of previous lower segment caesarean section (LSCS) in 14 (10.2%), hydrocephalus in 10 (7.2%), contracted pelvis in 8 (5.8%), craniotomy in 5 (3.6%), internal podalic version in 2 (1.4%) and 1 each (0.7%) with bicornuate uterus and accessory uterine horn.

# Atonic PPH

The incidence of atonic PPH was 12.7% (26/204). 20 of them had atonic PPH following caesarean section, 3 after forceps delivery and in 3 after normal delivery. In 15 patients the delivery was first tried at home and the patient was brought to the hospital after a significant delay. Thus prolonged labour was the major predisposing factor. It was not possible to control the bleeding by conservative techniques and hence the decision to do emergency hysterectomy was taken. The reported incidence for atonic PPH by various authors is variable from as low as 1% (Oumachigui and Nayak, 1978) and 1.8% (Pandya and Shah, 1987) to higher incidence of 20% (Patel and Parikh, 1960) and 44% (Sotto and Arachambault, 1957).

# Perforation of Uterus

Total 10 patients (4.9%) had emergency hysterectomy done for this indication. In 9 it was result of dilatation and curettage (D & C) done for medical termination of pregnancy (MTP) while in 1 D & C was done for retained placental pieces following which there was severe hemorrhage unresponsive to conventional measures. Perforation was detected in this case at the time of surgery. 3 of these cases had associated intestinal injury which was repaired.

# Abnormalities of Placenta

Total 15 patients (7.3%) underwent

emergency hysterectomy for abnormalities of placenta. Placenta accreta was found in 4 (3 of them had previous LSCS where placenta was adherent to previous scar). 5 patients each had placenta increta and placenta previa and 1 patient had placenta percreta. For placenta accreta similar incidence has been reported by Omachigui and Nayak (1978) of 2% and by Sikdar and Mandal (1980) of 3% while a much higher incidence of 20% was reported by Pal and Roychoudhary (1985). In 5 patients with placenta previa (without increta) emergency hysterectomy was to be undertaken because of severe PPH. In placental abnormalities, mortality is high with conservative treatment and even if the patient survives the complication during the next pregnancy can not be avoided (Sumwong et al, 1966). Sikdar and Mandal (1980) reported a mortality of 50% even after hysterectomy.

# Secondary PPH

This was indication in 7 (3.4%) cases (5 with placenta previa) for emergency hysterectomy. In 1 multipara PPH was there after LSCS and in 1, 3rd para PPH developed following home delivery. When all conservative measures failed emergency hysterectomy was done.

# Couvelaire Uterus

Four (1.9%) hysterectomies in the present series were done for this indication. 3 of the cases had LSCS done for threatening rupture while the other had abruptio placentae. Dutaa and Pal (1979) reported a lesser incidence of 1%, however, rather high incidence of 20% was reported by Sotto and Arachambault (1957) and Pal and Roychoudhary (1985).

#### **Broad Ligament Hematoma**

This was the indication in 5 (2.4%) cases of present series, 2 of whom had

previous LSCS. Dutta and Pal (1979) and Sikdar and Mandal (1980) reported incidence of 17% and 18%, respectively. Extension of uterine incision during caesarean section leading to hematoma formation is the most common cause of this complication.

#### Miscellaneous Indications

In the present series, in 3 cases emergency hysterectomy was done for reasons not encountered routinely. 1 patient had obstructed labour and on LSCS the lower uterine segment was so friable that the stitches applied got cut through and hysterectomy was needed. In remaining 2 cases, 1 each had multiple fibroids and ovarian tumor detected during LSCS and hence in these 2 cases it was not really emergency hysterectomy to save the mothers life (if the uterus is not removed). Rather to avoid another surgery hysterectomy was done.

# Types of Surgery done

Though subtotal hysterectomy has the disadvantages of leaving part of cervix which may be a source of postoperative bleeding, or later in life, a source of malignancy, many times a quick subtotal hysterectomy has to be undertaken to save patients life. According to Omachigui and Nayak (1976), where rupture of uterus follows obstructed labour and the condition of the patient is poor, no attempt should be made to remove the cervix. Gelle et al (1974) suggested that a subtotal hysterectomy is to be performed to secure hemostasis and attempt to remove the cervix is to be made if the condition of the patient improves. In the present series, 66.2% of patients underwent subtotal and 33.8% patients, total hysterectomy. In series of Sikdar and Mandal (1980) and Omachigui and Nayak (1978), 57.4% and 66.6% patients, respectively, underwent subtotal and the remaining total

hysterectomy, comparable to the present series. Subtotal hysterectomy is preferred in our circumstances as the patient report to hospital in such a moribund condition that a quick operative procedure is beneficial to save their lives. Total hysterectomy was required where cervix and vagina were involved either by injury or by attachment of placenta, which was also suggested by Prabhavati and Mukherjee (1963) and Omachigui and Nayak (1978).

Ovarian conservation was possible in 58.8% of cases. However, in 20.2% of cases uni and 21% of cases bilateral salpingo-oopherectomy was done. Ovarian conservation is not possible when it is necessary to do salpingo-oopherectomy to achieve

hemostasis.

# MATERNAL MORBIDITY AND MORTALITY

In 72.5% of our cases the postoperative course was uneventful. The remaining had urinary tract infection (most common, 22%), wound sepsis, paralytic ileus, pulmonary complications (atelectasis, pneumonitis, pulmonary edema), and, gluteal abscess, in decreasing order of frequency. The reported incidence of UTI was 9% by Sikdar and Mandal (1980). Catheterization and injury to the urinary tract predispose to UTI.

Maternal mortality was 6.8% (7 each due to septic and hemorrhagic shock). 9 of them were with rupture uterus, 2 with atonic PPH and 1 each with couvelaire uterus, placenta

increta, and, septic uterus after MTP. Six of these cases were taken for emergency hysterectomy in a very poor general condition, the pulse being impalpable, in a bid to save their lives. Sikdar and Mandal (1980) reported a higher maternal mortality of 25.9%, the most common cause being septic shock.

#### FETAL OUTCOME

Overall fetal salvage rate was 18.5% only. Fetal salvage was nil (0%) in the series of Indradevi and Reddy (1975) whereas Prabhavati and Mukherjee (1963) reported a higher fetal salvage rate.

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