

HYSTERECTOMY IN OBSTETRICS

By

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Introduction

In the present day obstetric practice, hysterectomy is a rare event. Most often it is a life saving procedure in cases with uncontrollable haemorrhage and/or sepsis. In addition, elective hysterectomy is performed for those with co-existing cervical or ovarian malignancy. Elective hysterectomy may also be performed as a means of sterilization.

We are presenting here an analysis of 106 cases of hysterectomies performed during pregnancy, labour and puerperium at the L.T.M.M. College and L.T.M.G. Hospital, Sion, Bombay. The aim was to study the indications, difficulties encountered during the operation, modifications in the operative technique, complications, morbidity and mortality.

Material and Methods

During a 15 year period from 1972-1986, a total of 106 obstetric hysterectomies were performed at L.T.M.G. Hospital, Sion, Bombay. We have included hysterectomies performed for any indication, emergency or elective, during pregnancy, labour and puerperium. They also included hysterectomies performed for complications following pregnancy terminations such as perforations, sepsis etc.

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Each case record was analysed in detail with special emphasis on indications, demographic details such as age, parity, booked, unbooked etc., type of the operation performed, viz. total or subtotal and its reason, problems encountered during the operation, complications, morbidity and mortality.

A thought was also given to find out means to prevent such drastic obstetric eventuality and to prevent complications during or after the operation.

Observations

Incidence: During 15 years period 1972-86, there were 87855 deliveries and 106 obstetric hysterectomies giving the incidence as 1 in 829 deliveries. Since rupture uterus was the commonest indication, we also found out the number of rupture uteri during the period of study and those requiring hysterectomy. There were 119 cases of rupture uterus and 72 of them required hysterectomy.

Majority of the patients were from the age group of 20-30 years and parity 2 and above. Only 3 were nulliparous, and 5 were primipara, who required hysterectomy for rupture uterus.

Majority were operated on an emergency basis, except 4 cases viz. for carcinoma cervix (2), vesicular mole (1), secondary abdominal pregnancy (1), in whom planned elective operation was performed. Out of 106, 84 were unbooked. Majority (61) were transfers either from peripheral maternity homes, private nursing homes and semi

urban-rural areas. These transferred cases were often in bad general condition due to haemorrhage, sepsis due to neglected labour.

Indications (Table I and II)

TABLE I
Indications for Obstetric Hysterectomy

M.T.P. Perforations	11 (10.3%)
Rupture uterus	72 (67.8%)
Postpartum Haem.	9 (8.4%)
Septic Abortions	9 (8.4%)
Carcinoma Cervix	2 (1.8%)
Vesicular Mole	1 (0.9%)
Secondary Abd. Pregnancy	1 (0.9%)
Chorio amnionitis	1 (0.9%)
Total	106 (100%)

TABLE II

Causes of Rupture Uterus:
(72 Obstetric Hysterectomies)

Prolonged Labour—37 (51.3%)

- (i) C.P.D. (26)
- (ii) Malpresentations (8)
- (iii) Foetal Anomaly (3)

Previous L.S.C.S. — 8 (11.1%)

Traumatic Rupture — 24 (33.3%)

- (i) Forceps — (8)
- (ii) M.R.P. — (3)
- (iii) I.V.P. — (3)
- (iv) Oxytocin — (10)

Miscellaneous — 3 (4.16%)

- (i) Spontaneous Post wall Rupture — 1
- (ii) Cervicopexy — 1
- (iii) Cerclage Operation — 1

The most common indication was rupture uterus (72, 67.8%). The commonest cause of rupture (Table II) was prolonged labour in 37 (51.3%), trauma in 24 (33.3%), dehiscence of previous caesarean scar in 8 (11.1%). Miscellaneous causes included spontaneous posterior wall rupture, previous cervicopexy and previous cerclage operations in one case each.

In 11 cases (11.3%), hysterectomy was required in early pregnancy for extensive perforation either at the fundus, lateral uterine wall or cornu, developed during suction evacuation for termination of pregnancy. Invariably, there were more than one perforation associated with broad ligament haematoma.

Hysterectomy was required for uncontrollable atonic post-partum haemorrhage in 9 (8.4%). Retained morbidly adherent placenta was the cause in 2, placenta praevia in 2, accidental haemorrhage in 1. In remaining 5 cases exact cause for uterine atony could not be ascertained. Hysterectomy was performed for 9 cases of septic abortions with endotoxic shock, as means of removal of septic focus and exploration for drainage of the pus. Of these 5 were following illegal abortions performed by dais, hakims by introducing stick, catheter etc. Remaining 4 were following incomplete M.T.P.'s, in private hospitals.

Other indications included carcinoma cervix (2), vesicular mole (1), secondary abdominal pregnancy (1), and choriocamnionitis with septic shock following neglected transverse lye (1).

Since during pregnancy, tissues in the pelvis are lax, highly vascularized and oedematous, although separation of planes was easy the amount of bleeding especially back flow from collaterals was considerable. This can be minimized by securing uterine side of the pedicle as well.

Associated broad ligament haematoma was present in 22 cases of rupture uteri with lateral tear and cervical extension.

Associated intra-operative injury to the bladder took place in 11 cases, either while pushing the bladder down, or while opening uterovesical fold of the peritoneum. Of these 11 cases, 4 had previous caesarean section.

Accidental inclusion of the ureters in the

ligature of uterine blood vessels took place in 3 cases. It was noticed during the operation and the ureter was freed in 2, while in other it was diagnosed during post-operative period requiring re-exploration and ureteric implantation in the bladder.

Subtotal hysterectomy was performed in 21, while total hysterectomy was performed in remaining 85 cases.

Surprisingly radical hysterectomy (Wertheim's) for carcinoma cervix with pregnancy was easy and could be completed within two hours, probably due to easy separation of surgical planes.

Most of the patients required blood transfusion ranging from 2-10 units of blood.

Post-operative complications, maternal mortality and Hospital stay (Table III)

TABLE III
Postoperative Complications (%)

Fever	32 (30.1%)
Pulm. Embolism	8 (5.8%)
Paralytic Ileus	23 (21.6%)
Wound Infection	7 (6.6%)
V.V.F./U.V.F.	2 (1.8%)
Peritonitis	6 (5.8%)
Endotoxic Shock	6 (5.8%)
C.C.F.	2 (1.8%)

38 cases were without any post-operative complications, while remaining 68 were with one or more complications as shown in the Table. Complications in the order of importance were pulmonary embolism in 6 (5.8%), peritonitis and endotoxic shock in 6 (5.8%) each. One case each developed vesicovaginal and ureterovaginal fistula.

Maternal mortality was 9.3% and included 10 deaths of which 4 were due to bleeding, irreversible shock and cardio respiratory failure, 2 were due to D.I.C. on the 2nd and 7th post-operative day respectively, 2 expired due to pulmonary embolism,

confirmed on postmortem and 2 due to peritonitis and septic shock on 11th post-operative day. All the maternal deaths were unbooked and transferred cases and deaths probably could be attributed to lack of proper antenatal care and delay in transfer.

The average hospital stay was 15 days. Two patients stayed in the hospital for 26 and 30 days respectively because of post-operative complications like peritonitis and vesicovaginal fistula respectively.

Discussion and Conclusions

In the present day obstetric practice, hysterectomy is a rare event because fewer obstetricians have an individual experience of the procedure, it is essential that one should be familiar with the factors that may precipitate the need for such drastic surgery and its inherent complications.

The incidence of hysterectomy in obstetric practice at our hospital was 1 in 829 deliveries (0.12%). Of these only 4 were elective obstetric hysterectomies and remaining 102 were emergency obstetric hysterectomies. The incidence of obstetric hysterectomies from other series varies from 0.1% and 0.51% (Barclay, 1969) to 0.05% and 0.02% (Stardee and Rushton, 1986) emergency and elective obstetric hysterectomies respectively (Table IV). In many series, elective caesarean hysterectomy is practised as a means of sterilization (Britton, 1980). However, it is not advisable because of the increase operative risk and higher incidence of complications. The commonest indication for emergency hysterectomy was rupture uterus in 72 (67.8%). It is considerably high as compared to western authors (11.4% and 1 in 4350 deliveries, Sturdee and Rushton, 1986; 22.5% Barclay 1969). It was mainly due to unbooked and transferred cases from peripheral maternity homes with poor obstetric management. This could be avoided by

TABLE IV

Series of Hysterectomies in Obstetric Practice Emergency and Elective in Comparison with our series

Authors	Country	Emergency Hysterectomy %	Elective Hysterectomy %
Barclay (1969)	USA	0.1	0.51
Patterson (1970)	USA	0.02	0.34
Hill and Beischer (1980)	Australia	0.07	0.02
Rachagan and Sivanesaratnam (1984)	Malaysia	0.05	—
Stardee and Rushton (1986)	U.K.	0.05	0.02
Our series	India	0.12	

proper antenatal and intranatal care by trained obstetrician and timely transferred to teaching hospitals.

It may be advisable to do total obstetric hysterectomy; one may have to resort to subtotal hysterectomy due to anaesthetic risk and increased operative morbidity to the patient. Post-operative pyrexia, pralytic ileus, wound infection were common complications. Serious complications included pulmonary embolism, septic shock etc. Prolonged labour, intrauterine manipulations and dormant sepsis probably account for these complications and high maternal mortality.

We feel that obstetric hysterectomy is a life saving operation in most of the cases where indications should be crystal clear, decision should be prompt, and question

whether total or subtotal should be answered by the surgeon depending upon the condition of the patient and facilities available.

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