



Research Article

EMERGENCY OBSTETRIC HYSTERECTOMY—A RETROSPECTIVE STUDY OVER A PERIOD OF 5 YEARS IN A PERIPHERAL MEDICAL COLLEGE

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Abstract

Purpose- Post partum haemorrhage remains an important cause of significant maternal morbidity and mortality throughout the world. The objective of this study was to review the incidence, indications, predisposing factors, and associated complications of emergency peripartum hysterectomy. **Methods-** This is a retrospective observational study done in a Bankura Sammilani Medical College, Bankura, West Bengal, India between Jan 2010 to Dec 2014. Women who underwent emergency peripartum hysterectomy after cesarean delivery or following vaginal birth due to severe PPH who did not respond to conservative treatment were included in the study. Data were abstracted from chart reviews. Primary outcomes included indications, risk factors, maternal morbidity, and mortality. **Results-** There were 74 emergency peripartum hysterectomies among 99342 confinements, having incidence of 0.07%. Common indications included uterine rupture (51.3%), PPH (33.3%), and morbidly adherent placenta (8.1%). The majority of study cohort (63.5%) had undergone STH. Postoperatively 8 patients (10.8%) developed febrile illness, 4 (5.4%) had wound infection, 1 (1.3%) developed DIC and 3 (4%) experienced bladder injury. The maternal mortality in this study was 4%. **Conclusions-** Hysterectomy for the control of obstetric haemorrhage is usually associated with significant mortality and morbidity. Prompt intervention to perform peripartum hysterectomy decreases maternal morbidity and mortality significantly.

Keywords- Obstetric; Hysterectomy; Emergency; Outcome; Post partum Haemorrhage.

Abbreviations- TAH- Total Abdominal Hysterectomy; STH- SubTotal Hysterectomy; DIC- Disseminated Intravascular Coagulation, PPH- Post Partum Haemorrhage

INTRODUCTION

The primary function of uterus is child bearing. But situations arise during the process of childbearing, when uterus is to be sacrificed to save the life of the mother as the last resort. There is no such difficult and crucial moment in obstetrics when the decision of hysterectomy is taken and a precious life is saved at the cost of future child bearing capacity. Historically, hysterectomy for obstetric reasons was performed mostly to reduce the arising from the sequelae of cesarean section. Now the common indications are uncontrolled PPH, rupture uterus, sepsis and morbidly adhered placenta.

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Usually obstetric hysterectomy is done in a haemodynamically and /or metabolically compromised patient and this fact, along with the effect of anaesthesia, increases the postoperative morbidity and mortality rate. The operation along with proper anaesthesia, and intensive care of haemodynamic and metabolic status of patients can improve the overall outcome. Hysterectomy not only prevents mortality but it reduces also the morbidity significantly.

MATERIALS AND METHODS

It is a retrospective analysis of 74 cases of obstetric hysterectomy done in B.S. Medical College, Bankura over a period of five years from Jan2010 to Dec2014. Maternal profiles, indications of hysterectomy, predisposing factors present, types of operations, maternal mortality and morbidity were studied and critically analysed.

RESULTS

Out of total 99342 confinements during the five year period, 74 cases of obstetric hysterectomy were performed amounting to incidence of 0.07% or 1 in 1428 deliveries.

The majority of patients in our study were in age group 20-25 yrs (66.2%), followed by 26-30 yrs (18.9%). Youngest age was 18 yrs (table 1)

Table1. Age Distribution of Cases(n=74)

Age in yrs %	No of cases
<20	5
6.7	
20-25	49
66.2	
26-30	14
18.9	
31-35	5
6.7	
36-40	1
1.3	
Total	74
100	



Table 2 shows the majority of patients in our study were of parity P2 (45.9%) and only 2.7% were nullipara.

Table 2:Parity distribution of cases(n=74)

Parity %	No of cases
P0 2.7	2
P1 18.9	14
P2 45.9	34
P3 27	20
P4 5.4	4
Total 100	74

Table 3 : Indications of Obstetric Hysterectomy(n=74)

Aetiology	No	%
PPH	25	33.7
Atonic	19	25.6
Traumatic	4	5.4
Secondary	2	2.7
Ruptured Uterus	38	51.3
Spontaneous	15	20.2
Scar rupture	20	27
Forceps injury	2	2.7
Silent rupture	1	1.3
Morbidly adherent placenta	6	8.1
Septic abortion	1	1.3
Molar Pregnancy(Invasive mole)	1	1.3
Choriocarcinoma	1	1.3
Cornual ectopic pregnancy	2	2.7



Table 3 shows indications of obstetric hysterectomy in our series out of 74 total cases, in 38 cases (51.3%) hysterectomy was performed for rupture of uterus, of which in 27% cases there was previous scar. In 25(33.7%) cases the indication was PPH, of which 19 cases (25.6%) had atonic PPH. Secondary PPH developed in 2 cases after caesarean section done outside and on laparotomy non union of uterine wound was detected. In two cases it was done for cornual pregnancy rupture, and 3 cases were done for septic abortion, invasive molar pregnancy and choriocarcinoma respectively. Morbidly adherent placenta was the indication of hysterectomy in 6 cases (8.1%).

Most common predisposing factors for PPH leading to hysterectomy were prolonged labour (16 cases) and placenta previa in 3 cases. Most common etiology leading to ruptured uterus was scar rupture in previous caesarean section (22 cases) and obstructed labour (16 cases).

Table 4: Predisposing factors

RUPTURED UTERUS (38)	No of cases
Previous caesarean section	22
Obstructed labour	16
PPH (25)	
Placenta previa	3
Over distension of uterus	1
Prolonged labour	16
Forceps delivery	2
Repeat caesarean section	3
MORBIDLY ADHERENT PLACENTA (6)	
Post CS pregnancy with Placenta previa	4
Post CS pregnancy	2

Subtotal hysterectomy was done in 47 cases (63.5%) and total hysterectomy was done in 27 cases (36.5%) of placenta previa with bleeding or adherent placenta to lower segment. One case of secondary PPH also underwent total hysterectomy.

Table 5: Other surgeries done along with hysterectomy

Unilateral salpingoophorectomy	7
Bilateral salpingoophorectomy	1
Repair of bladder injury	3
Ligation of anterior division of internal iliac artery (unilateral or bilateral)	8
Resection and anastomosis of small gut	1
Ligation of vaginal plexus	1



Unilateral salpingoophorectomy was done in 7 cases(9.4%) . Bilateral salpingoophorectomy was done in a case of septic abortion where ovaries were severely damaged and included in tuboovarian mass. Different important surgeries done(table 5) in association of hysterectomy were ligation of anterior division of internal iliac artery(unilateral or bilateral) in 8 cases(10.8%) and resection anastomosis of small gut in 1 case (1.35%) where gut was injured in an attempt of performing D/E operation. Repair of bladder injury was done in 3 cases(4%)

Table :6 Morbidity and mortality

Fever	8	10.8%
Septicaemia	3	4%
Wound infection	4	5.4%
Bladder injury	3	4%
Renal failure	2	2.7%
DIC	1	1.35%
Death	3	4%

Almost all cases (70 cases) received blood transfusion ranging from 2-6 units. Fever, septicaemia and wound infections were the common complications(Table 6) In two cases of atonic PPH with PIH, the patients developed renal failure. Three patients were admitted in such a moribund condition that inspite of hysterectomy, lives could not be saved. Among these three cases one had ruptured uterus, one had septic abortion and another was referred from outside with severe PPH.

DISCUSSION

Incidence of obstetric hysterectomy in our study is 1 in 1428 deliveries or 0.07% which is comparable to study by Praneswari Devi et al¹ (0.77%) and Agashe and Marathe² (0.56%) but lower than the figure of study by Allahabadia and Vaidya³ and Mukherjee et al⁴. Rupture of uterus is the commonest indication in our series(51.3%) as also in the study by Sharma et al⁵ and Sahu et al⁶. This is probably due to the lack of consciousness among people in rural area who had no idea about the outcome of next delivery in whom first delivery was by cesarean section and they wait for labour pain to start for the present delivery and which resulted to uterine rupture. PPH is the second most common indication in our series(33.7%). In our study septic abortion contributed only 1.3%. This may be probably due to decrease in the incidence of unsafe abortions and growing consciousness among common people. There was no other means other than hysterectomy in two nulliparous women both with cornual pregnancy rupture and presenting with massive intra peritoneal haemorrhage. STH was the commonly performed surgery in our study as was in other studies by Praneswari et al¹ and Marwaha Kaur et al⁷. This is probably due to the instability of maternal condition requiring a simple and speedy procedure with lesser degree of haemorrhage. But in case of placenta previa, total hysterectomy is usually required to remove the placental bed from the lower segment. In this series there were 3 (4%) cases of maternal deaths, a figure that is higher



than in previous studies by Clark et al⁸ and Stanco et al⁹ but lower than in some other series by Korejo R et al¹⁰. Delay in taking decision about hysterectomy and related hypotension and shock may have been the aggravating factors in all of the three maternal deaths.

Conflict of interest : none

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