



Research Article

A Retrospective Study of Obstetric Hysterectomy in a Tertiary Care Hospital

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Abstract

Background: *Obstetrical haemorrhage is a life threatening condition. This postpartum hemorrhage remains an important cause of significant maternal morbidity and mortality throughout the world. This study was done to analyze the indications, predisposing factors and associated complications of caesarean hysterectomy.*

Method: *This is a retrospective observational study conducted in Kamla Raja Hospital, Department of Obstetrics and Gynaecology, Gajra Raja Medical College, Gwalior from October 2014 to September 2016 over a period of two years. Each patients records was reviewed and detailed. Data were abstracted from chart reviews. Primary outcomes included indications, risk factors, maternal morbidity and mortality.*

Results: *of the total of 17,293 deliveries in a span of 2 years of study period 29 women underwent cesarean hysterectomy giving an incidence of 1.67 per 1000 deliveries. Most were of the age group of 20-30 years. Majority of patients had current or prior cesarean delivery. Most common cause were abnormal placentation i.e. placenta accrete, placenta increta percreta and PPH. There were two maternal death occurred. Most common post op complication was febrile illness.*

Conclusion: *Caesarean hysterectomy for control of obstetric hemorrhage is a life saving procedure however it is usually associated with significant morbidity and mortality. . This could be avoided by good antenatal care and careful selection of patients for cesarean delivery as it has immense impact on both present and future child bearing.*

Keywords: *Emergency obstetric hysterectomy [EPH], PPH, placenta accrete.*

Introduction

Obstetrical haemorrhage is always a nightmare. Various drugs and surgical techniques have been developed over time, especially to preserve the uterus. However in some circumstances as a last resort to save a woman's life emergency peripartum hysterectomy has to be performed. It is thus unequivocal marker of severe maternal morbidity and mortality.¹

In our study we reviewed all peripartum hysterectomies done at our institute over a period of two years with an aim of determining the incidence, risk factors, management issue and maternal morbidity and mortality.

Material and Methods

The present retrospective study included all the women who underwent peripartum hysterectomy

in the Department of Obstetrics and Gynaecology, Kamla Raja Hospital and Gajra Raja Medical College over a span of 2 years (October 2014 to September 2016).

Each case file was studied in detail for demographic profile, clinical characteristics, operative notes for indications, postoperative management.

The rate of emergency hysterectomy increased with increasing age and parity which is consistent with other large studies.^{2,3}

The present study identified placenta accreta as the major reason for hysterectomy which is consistent with other studies.^{4,5,6}

Results

A total of 17,293 women delivered during our study period of 2 years emergency peripartum hysterectomy was performed in 29 women. The incidence of emergency peripartum hysterectomy was 1.67/1000 deliveries.

Table no. 1 Age wise distribution of patients

Age group (years)	No. of patients	Percentage
20-30	22	75.8%
31-40	7	24.2%
Total	29	100%

In present study maximum number of patients belong to age group of 20-30 years i.e. 75.8% .

Table 2: Parity wise distribution of patients

Parity	No. of patients	Percentage
P1	12	41.3%
≥ P2	17	58.7%
Total	29	100%

In our study majority of patients are with parity 1, 2 and most had history of previous 1,2 cesarean. In our study no primi patient underwent EPH, 17 patients 58.62% were having parity ≥ 2.

Table 3: Distribution of patients according to mode of delivery

Mode of delivery	No. of patients	Percentage
Vaginal	4	13.7
CS	25	86.3
Total	29	100%

In present study, 25 patients (86.3%) has delivered by LSCS and undergone following caesarean

hysterectomy with various other induction. Only 3 delivered vaginally and one had retained placenta after vaginal delivery.

Table 4: Distribution of patients according to education

Education	No. of patients	Percentage
Educated	10	34.4%
Uneducated	19	65.6%

In our Study maximum no of pt. 19 (65.6%) were uneducated.

Table 5: Distribution of patients according to Referral

Referral	No. of patients	Percentage
Refereed	9	31%
Direct	20	69%

In present study 20 patients (69%) came directly to our hospital and only 9 were referred case.

Table 6: Distribution of patients according to outcome of patient

Outcome	No. of patients	Percentage
Shifted to ward	27	93.1%
Mortality	2	6.99%

In our study two maternal death occurred due to hemorrhagic shock along with other factors.

Table 7: Distribution of patients according to intervention done in ICU

Interventions	No. of patients	Percentage
Oxygen	29	100%
BT	29	100%
Nebulisation	2	6.9%
Ventilator	1	3.4%
Ionotropic agents	4	13.7%

In Our study all patients were shifted to ICU. One Patient required ventilatory support. 4 required ionotropic drugs postoperatively (13.7%). Blood transfusion & oxygen support are given to all patient.

Table 8 : Indication of caesarean hysterectomy

Interventions	No. of patients	Percentage
Previous CS with placenta Accreta increta, percreta	11	37.93%
Previous CS with PPH	7	24.14%
Previous CS with Placenta previa	4	13.79%
PPH	3	10.34%
Previous CS with Rupture uterus	3	10.34%
Retained Placenta with PPH	1	3.44%
Total	29	100

In present study most common cause of EPH is placenta accreta and Placenta previa that too with previous CS.

Table 9: The association between prior cesarean delivery with placenta accreta, increta, percreta, previa

Placental abnormality	No CS	1 CS 11 cases	2 CS 9 cases	3 CS 2 cases
Accreta (7)	0	1	4	2
Increta (3)	0	2	1	0
Percreta (1)	0	1	0	0
Previa (4)	1	3	0	0

In present study 2 cases had h/o previous 3 CS and both had placenta accrete. Out of 9 cases with previous h/o 2 CS 4 were having placenta accrete, 1 was with placenta increta. Out of 11 cases with h/o previous 1 CS 3 had placenta previa 2 had placenta increta, 1 case each of placenta accrete and percreta was there in present study. All the scarred uterus are the high risk for placental abnormalities and adherent placenta.

Table 10: Complication seen after cesarean hysterectomy

Complications	No. of patients	Percentage
Intraoperative hypotension	4	13.8%
Injury to bladder	3	10.3%
Febrile illness	6	20.7%
DIC	2	6.9%
Wound infection	5	17.2%
Maternal mortality	2	6.9%
Ureteric injury	0	0%
VVF	0	0%

In our study, 4 patients had operative hypotension (13.8%). 3 had bladder injury, 2 had DIC, none had ureteric injury and VVF. 2 maternal death seen due to haemorrhagic shock and DIC along with other factors.

Discussion

PPH along with sepsis and hypertensive disorders of pregnancy is a major cause of maternal mortality in India. Emergency peripartum hysterectomy is a life saving surgery performed in condition with intractable obstetric haemorrhage not consulted with other medical and surgical methods available. Any pregnant woman who undergoes peripartum hysterectomy thus could

have potentially child with timely and proper management the WHO has emphasized on the concept of maternal near miss.⁷

Incidence in our study is 1.67 / 1000 deliveries. The incidence is high then other studies 0.2% Sahu et al, 0.15%, Mukherjee, 0.26% by Gupta.^{8,9,10}

With increasing rates of cesarean section observation a worldwide, the incidence of these complications is likely to increase. The use of sonography, color flow doppler and magnetic resonance imaging can help in the early diagnosis of placenta accreta in women with placenta previa who have also undergone a previous cesarean delivery.

However incidence was 6.9/1000 delivery in study done by Sharma.¹¹

In present study EPH is more common in age group of 20-30 years which is similar to study by Saxena et al.¹²

The rate of emergency EPH increased with increasing parity, which is consistent with large studies.¹³ As in present pregnancy 17 patients 58.62/ were having parity more than > 2.

The incidence of peripartum hysterectomy was higher in women who had a into either one or more than previous CS.^{13,14}

In our study 2 mortality result due to hemorrhagic shock and along with other factors.

The incidence of peripartum hysterectomy is increasing in this era not because of improperly managed third stage of labour or obstructive labour but most likely because of increasing incidence of cesarean sections. chances of repeat cesarean section thus increase this ultimately increases the incidence of placenta previa and acereta. remarkable variability for the frequency of EPH including ranges from 0.2 to 5 per 1000 deliveries exist in literature.¹⁵

In our study EPH was performed in 25 (86.3 %) who had underwent CS only 4 patients have vaginal delivery thus EPH rate was significantly high in abdominal delivery group then the vaginal delivery group.¹⁶

Placenta accreta and PPH are the most common indications of EPH in present study. Kastner et al⁵ found placenta accrete to be the most common indication for EPH in his study.

The association among cesarean section, placenta previa and placenta accreta is well established Clark et al¹⁷ reported that in patients with placenta previa increased from 24% with one prior cesarean delivery to 67% with three or more prior cesarean delivery.

Postoperative complication as fever, wound infection, injury to bladder, DIC were common and comparable with other studies.^{18,19}

Conclusion

Emergency peripartum hysterectomy for the control of obstetric hemorrhage is a procedure usually associated with significant morbidity and mortality. It is a life saving procedure. Worldwide placenta previa accrete are the commonest indications for emergency peripartum hysterectomy. Proper antenatal care, early referrals and delivery of high risk group of women by skilled birth attendants and liberal blood transfusions and reducing the number of unnecessary cesarean sections are the keys to reduce the morbidity and mortality associated with emergency peripartum hysterectomy.

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