

A RETROSPECTIVE STUDY OF EMERGENCY HYSTERECTOMY PERFORMED IN LAST 5 YEARS AT KRISHNA HOSPITAL, KARAD

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ABSTRACT

OBJECTIVE

Study is to determine the incidence, indications of obstetric hysterectomy, maternal morbidity and maternal mortality associated with emergency obstetric hysterectomy at a tertiary hospital, Karad. This will help to highlight the lack of availability and inadequate utilisation of antenatal services. This will help to identify avoidable factors and stress factors; those need to organise health care services so as to improve maternal and foetal outcome.

MATERIAL AND METHODS

A retrospective analysis of 30 cases of emergency hysterectomies done for obstetric indications from JULY 2010 to JUNE 2015 was done. Indications for hysterectomy and causes of maternal morbidity and mortality were studied.

RESULTS

There were 30 cases of emergency hysterectomies amongst 19,635 deliveries during the period of study giving an incidence 0.15%, i.e. 1 in 654 deliveries.

CONCLUSION

The presence of risk factors like placenta previa, accreta, previous LSCS should facilitate referral or transfer of patients to a tertiary care hospital. When conservative measures like haemostatic sutures, internal iliac artery ligation, embolization is not feasible or has failed obstetric hysterectomy is performed without delay, in which delay would contribute to the maternal morbidity and in unfortunate cases mortality. Special provisions of blood components, dialysis facility and ventilator support associated with availability of experienced obstetrician, anaesthetist, neonatologist, physician and surgical services are necessary round the clock. Training of obstetrician in obstetric hysterectomy is very much necessary to reduce morbidity and mortality.

KEYWORDS

OH (Obstetric Hysterectomy), PPH (Postpartum Haemorrhage).

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INTRODUCTION

Obstetric Hysterectomy (OH) is an uncommon obstetric procedure performed on a gravid uterus during pregnancy, labour or puerperium. Horatio Storer performed and documented first obstetric hysterectomy in 1869, but with no desirable results. However, seven years later in 1876 Eduardo Porro performed the first caesarean subtotal hysterectomy successfully. His patient—Julia Cavallini, 25 years old primiparous dwarf, 57 inches in height, had markedly distorted pelvis due to rickets. It is named as “PORRO OPERATION.”^[1]

In modern obstetrics increased rate of caesarean delivery is associated with the rate of obstetric hysterectomy.^[2] Despite surgical and medical advances, postpartum haemorrhage remains an important contributor to maternal morbidity and mortality, both in developed and developing country.

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Although even perfect management of haemorrhage cannot always prevent surgery, given that atony is a major contribution to this pathology newer management options such as the B-lynch and other compression sutures may play an important role in preventing obstetric hysterectomy. Surgeon is in much dilemma when deciding to resort obstetric hysterectomy. On other hand it is the last resort to save mother's life besides the mother's reproductive capability. Proper timing and meticulous care may prevent maternal complications.

AIMS AND OBJECTIVES

Study is to determine the incidence, indications of obstetric hysterectomy, maternal morbidity and maternal mortality associated with emergency obstetric hysterectomy at a tertiary hospital, Karad. This will help to highlight the lack of availability and inadequate utilisation of antenatal services. This will help to identify avoidable factors and stress factors those need to organise health care services, so as to improve maternal and foetal outcome.

MATERIAL AND METHODS

A retrospective analysis of 30 cases of emergency hysterectomies done for obstetric indications from July 2010 to June 2015 was done. Indications for hysterectomy and causes of maternal morbidity and mortality were studied.

RESULTS

Incidence

There were 30 cases of emergency hysterectomies amongst 19,635 deliveries during the period of study giving an incidence 0.15%, i.e. 1 in 654 deliveries.

Maternal Characteristics

Age - 60% of the women were in the age group of 21-25 yrs. (See Table No. 1)

Age (Years)	No. of Patients	Percentage
21-25	18	60%
26-30	08	26%
31-35	02	12%
36-40	02	12%
Total	30	100%

Table 1: Obstetric Hysterectomy Performed in Various Age Group

Parity- More than 65% of patients belonged to parity three or four. (See Table No. 2)

Parity	No. of Patients	Percentage
Para 1	06	20%
Para 2	04	13%
Para 3	12	40%
Para 4	08	27%
Total	30	100%

Table 2: Obstetric Hysterectomy Performed in Various Parity Group

Indications

Postpartum haemorrhage (53%) and placenta previa (23%) were two major obstetric emergencies, for which obstetric hysterectomy performed. (See Table No. 3).

Indications	No. of Patients	Percentage
PPH	16	53%
Placental Previa	7	23%
Ruptured Uterus	3	10%
Vesicular Mole	3	10%
Uterine Perforation	1	4%
Total	30	100%

Table 3: Types of Emergencies for which Obstetric Hysterectomy Performed

Modes of Delivery and Hysterectomy

Most of the obstetric hysterectomies performed following LSCS, which were performed for various absolute or relative indications. (See Table No. 4).

Modes of Delivery	No. of Hysterectomies
Vaginal	2
After LSCS	24
Following abortion	1
Following vesicular mole	3
Total	30

Table 4: Mode of Delivery and Hysterectomy

Type of Operations

In 70% of cases subtotal hysterectomy was performed and in others total hysterectomy was performed. Failed additional surgical procedures were:

- Haemostatic B-lynch sutures taken in 2 cases.
- Internal iliac artery ligation was done in 6 cases.

Average Blood Transfusion

Blood and blood products (Like Packed Cell Volume, Fresh Frozen Plasma, Platelets) were liberally given in all cases ranging from 4-25 units.

Maternal Morbidity (Post-operative Complications)

Febrile illness and disseminated intravascular coagulopathy were most common complications observed after obstetric hysterectomy. (See Chart No. 1)

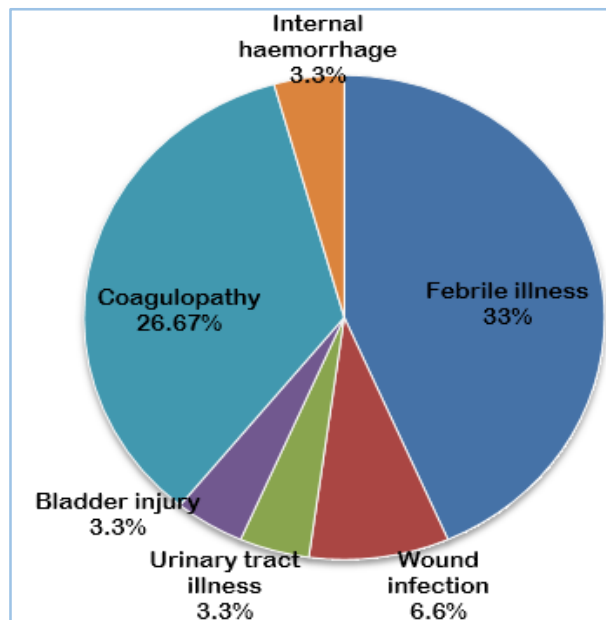


Chart 1: Various Complications Observed after Obstetric Hysterectomy

Maternal Mortality

There were 3 maternal deaths occurred giving maternal mortality of 10%. Two died due to PPH leading to septicemic shock and disseminated intravascular coagulopathy. One died due to excessive haemorrhage following suction evacuation for vesicular mole.

DISCUSSION

Peripartum hysterectomy is a major operation often done as an emergency procedure associated with significant maternal morbidity and mortality and foetal morbidity.^[3]

There were 19,635 deliveries conducted. During the study period, 30 cases of obstetric hysterectomies were done giving incidence of 0.15% comparable to Kastner et al^[4] (0.14%), Mukherjee et al^[5] (0.15%) and Sahu et al^[6] (0.20%).

Majority of cases who underwent obstetric hysterectomies were multigravida, i.e. 20 cases comprising 67% comparable to Kastner et al^[6] (72.3%) and Kant A. Wadhvani.^[7] (60.9%).

In our study most common indication was atonic PPH in 16 cases, i.e. 53% comparable with Jindal et al^[8] (50%) and McKnight.^[9] (47%). Abnormal placentation is second most common indication in our study, i.e. 7 cases comprising (23%) comparable to McKnight.^[9] (36%) and Praneshwari Devi et al^[10] (26.9%).

In our study most common post-operative complication is febrile illness, i.e. 10 cases (33%) comparable to Nusrat et al^[11] (28.6%) and Lovina Machedo.^[12] (26.11%). DIC is the second most common complication in our study, i.e. 8 cases

(26.67%) comparable to Nusrat et al^[11] (14.3%) and highest was in King Abudalaziz.^[13] (53%).

In our study maternal mortality was seen in 3 cases, i.e. 10% comparable with Jindal et al^[8] (10%) and Gupta et al^[14] (10.9%).

CONCLUSION

Postpartum haemorrhage is one of the leading cause of maternal mortality and morbidity and represents the most challenging complication that obstetrician will face. Although, no risk assessment system can predict all instances where patients who are at high risk for severe haemorrhage and the subsequent need of obstetric hysterectomy can be identified before delivery. The presence of risk factors like placenta previa, accreta, previous LSCS should facilitate referral or transfer of patients to a tertiary care hospital. When conservative measures like haemostatic sutures, internal iliac artery ligation, embolisation is not feasible or has failed obstetric hysterectomy is performed without delay, in which delay would contribute to the maternal morbidity and in unfortunate cases mortality. Special provisions of blood components, dialysis facility and ventilator support associated with availability of experienced obstetrician, anaesthetist, neonatologist, physician and surgical services are necessary round the clock. Training of obstetrician in obstetric hysterectomy is very much necessary to reduce morbidity and mortality.

SUMMARY

- A total of 19,635 deliveries conducted in study period. Among these there were 30 cases of hysterectomies giving rise to a frequency of 1.5/1000 cases.
- Majority of cases (18 cases) were in the age group of 21-25 years.
- 20 cases were multipara (67%).
- Most common cause was Atonic PPH (53%). Placenta previa (23%) was second most common cause.
- Majority of cases were delivered by LSCS (24 cases).
- Maternal mortality was seen in 3 cases (10%).
- Blood transfusion was required in all cases.
- Most common post-operative complication was febrile illness (44%) and DIC (35%).

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