Obstetric hysterectomy

Gauri Dank*, Shubhangi Mande**, Kunal Jadhav*, Swati Shiradkar***

*Assistant Professor, **Associate Professor, ***Professor and HOD, Department Of OBGY, MGM Medical College and Hospital Aurangabad – 431003, Maharashtra, INDIA.

Email: sampark09@gmail.com

Abstract

Objectives: To study indications and maternal outcome of obstetric hysterectomy. **Methods**: The retrospective observational analytical study was conducted at the Department of Obstetrics and Gynaecology, MGM Medical College and Hospital, Aurangabad from January 2012 to December 2014. Medical records of 11 patients who had undergone obstetric hysterectomy were scrutinized and evaluated retrospectively. Maternal characteristics, indications, and maternal morbidity and mortality were analysed. **Results:** During the study period there were 11 e obstetric hysterectomies and 5000 deliveries, giving an incidence of 0.22%. Majority of the cases were unbooked (73.1%). It was more common in para three and four (54.4%). Refractory atonic post-portumhemorrhage and ruptured uterus were the common indications (81.7%). The maternal mortality was 9.7%. **Conclusion:** Obstetric hysterectomy is a life saving procedure. The maternal outcome greatly depends on timely decision and good clinical judgment because unnecessary delay can cost life and undue haste can cause morbidity. **Keywords:** obstetric hysterectomy, maternal mortality.

*Address for Correspondence:

Dr. Gauri Dank, Assistant Professor, Department Of OBGY, MGM Medical College and Hospital Aurangabad – 431003, Maharashtra, INDIA.

Email: sampark09@gmail.com

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INTRODUCTION

In no other gynecological or obstetrical surgery is the surgeon in as much a dilemma as when deciding to resort to an emergency hysterectomy. On one hand it is the last resort to save a mother's life, and on the other hand, the mother's reproductive capability is 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. Proper timing and meticulous care may reduce or prevent maternal mortality. It was first proposed in 1869 but with no desirable results. However seven years later (1876) the

first caesarean subtotal hysterectomy was carried out successfully, with the result that both the mother and the baby survived.

MATERIAL AND METHODS

A retrospective analysis of 11 cases of obstetrichysterectomies over a period of 3 years from 2011 to 2014 was done. Maternal characteristics, indications for hysterectomy, and maternal morbidity and mortality were studied. Each case record was analyzed in details with special emphasis on indication, demographic data (age, parity, booked or emergency case etc.), type of operation performed, problems encountered during operation, morbidity, and mortality.

RESULTS

Incidence: There were 11 cases of obstetric hysterectomies amongst 5000 deliveries during the period of study giving an incidence of 0.22%

Maternal Characteristics

Age -54.5% of the women were in the age group of 20-25 years. (Table -1) The youngest woman was of 22 years of age and the oldest was 35 years old

	Table 1: Age (n=11)	
Age(years)	No. of patients	Percentage
20-25	6	54.5%
26-30	3	27.3%
31-35	2	18.1%

Table 2: Gravida

	No. of patients	Atonic PPH	Rupture	Accreta	АРН
Gravida2	2			++	
Gravida3	4		+	++	+
Gravida4	5	++	++	+	

45.4% of the patients were gravida 4 Indications Postpartum hemorrhage (45.4%%) and ruptured uterus (36.3%) were the two major indications for obstetric hysterectomy (Table 3).

Table 3: Antenatal booking – Eight cases were not booked (73.1%) and three booked (26.8%) for delivery

	No. of patients	percentage
Booked	3	26.8%
Unbooked referred with complications	4	36.5%
Unbookedand complications developed later	8	36.5%

In placenta previa, the placenta is attached to the lower uterine segment which does not retract well after placental separation and this leads to the sinuses remaining open after delivery, causing postpartum hemorrhage (PPH). Operative intervention and a high incidence of adherent placenta are also contributing factors for

Table 4: High Risk factors

Grand multiparity	2
APH	1
Placenta accreta	2
Obstructed labour	1
Severe anemia	1

Multiparity itself is a high risk factor leading to increased incidence of atonic PPH, ruptured uterus and severe anaemia

Table 5: Type of Operation:

Total	4	36.3%
subtotal	7	63.6%

In 63.6% of the cases, subtotal hysterectomy was performed. It is not always required to do total abdominal hysterectomy as the patients' general condition is often poor. But in certain conditions like colporrhexis one has to go for total hysterectomy. It is important to ligate the stumps doubly and carefully, as tissues are more vascular

and edematous and fragile. Altered coagulation often contributes to more bleeding. Hence simultaneous correction of coagulation profile by transfusion of blood and blood products is mandatory.

Additional surgical procedure

Internal iliac artery ligation was done in 2 cases. Repair of a tear in the bladder was required in one case and there was ureteric injury also which required repair.

Table 6: Complications and post-operative morbidity

Febrile morbidity	3	27.2%
Wound infection	2	18.1%
Urinary tract infection	4	36.3%
Bladder injury	1	9.09%
Ureteric injury	1	9.09%
DIC	2	18.1%
death	2	18.1%

Some women had more than one morbidity. Table 6 shows that 27.2% of cases suffered from febrile morbidity

Table 7: Blood and blood products transfusion

	PCV	FFP	platelet
DIC	+	+	+
Accreta	+	+	-
Rupture	+	-	

100% patients required Packed cell transfusion due to considerable blood loss. There were two maternal deaths giving a maternal mortality of 9.7%.

Table 8: Comparative incidence of obstetric hysterectomy

Author	Incidence		
Sturdee and Rushton (1986)	0.07%		
Ambiye and Venkatraman (1988)	0.12%		
Radha <i>et al</i> (1991)	0.13%		
Mantri <i>et al</i> (1993)	0.32%		
Agashe and Marathe (1995)	0.056%		
Allahabadia and Vaidya (1991)	0.19%		
Gupta et al (2001)	0.26%		
Sinha and Mishra (2001)	0.38%		
Makherjee <i>et al</i>	0.15%		
Kanwar et al (2003)	0.32%		
Praneshwari Devi et al (2004)	0.0779%		
Gupta <i>et al</i> (2001) Sinha and Mishra (2001) Makherjee <i>et al</i> Kanwar <i>et al</i> (2003)	0.26% 0.38% 0.15% 0.32%		

Present study 0.22%

DISCUSSION

Obstetric hysterectomy still remains a necessary tool for the obstetrician. Knowledge of this operation and skill at its performance saves lives in catastrophic rupture of the uterus or intractable PPH. Incidence of obstetric hysterectomy in the present study was 0.22% which is higher than that in many other studies because our institution is an important referral centre in this region and most of our cases were referred from outside in moribund condition after complications occurred. PPH is the commonest indication for obstetric hysterectomy in our study (45.4%). In a study by Agashe and Marathe⁵ also, PPH was the commonest indication (60%). Ruptured uterus is the second most common indication in our study accounting for 36.3% of cases. Incidence reported by Mantri et al^4 is 67.2%, and by Ambiye and Venkatraman67.8%. Allahabadia et al⁶ reported a lower incidence of 20%. The mortality amongst our patients was 9.7% comparable to 9.3% reported by Ambiye and Venkatraman³. Mantri et al⁴ reported 14% mortality and Allahabadia and Vaidya 6 32%. Sturdee and Rushton¹ reported no mortality in their series of 47 cases. Postoperative shock, pyrexia, and wound infection were common complications. Prolonged labor, anaemia and dormant sepsis probably account for these complications. These could be prevented by early referral of these cases to well equipped centers which can treat emergency obstetric cases promptly and efficiently. Obstetric hysterectomy is a life saving procedure but decision should be prompt and treatment by an experienced surgeon. Every obstetrician should be trained to perform this procedure. Inspite of this life saving measure, there occur significant number of maternal deaths which can be prevented by good antenatal and intranatal care, active management of labor, early recognition of complications, timely referral, and easy availability of transport and blood transfusion facilities. Community education about advantages of institutional delivery or delivery by trained dais will save many such emergencies.

Take home Message

Prompt antenatal care and promotion of hospital delivery. Timely decision of obstetric hysterectomy to save the life of mother. Prior placental localisation in every post LSCS patient. Colour Doppler to rule out accreta if placenta is in lower uterine segment.

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