

Emergency Obstetric Hysterectomy

R K Praneshwari Devi, N Nabakishore Singh, Th. Darendra Singh

Department of Obstetrics and Gynecology, Regional Institute of Medical Sciences, Imphal

OBJECTIVE – To study indications and maternal outcome of emergency obstetric hysterectomy in order to reduce the maternal morbidity and mortality in complicated obstetric cases. **METHOD** – A prospective study of the cases of emergency obstetric hysterectomy performed over a period of five years from 1996 to 2001, was done. **RESULTS** – During the study period, there were 26 cases of obstetric hysterectomies and 33371 deliveries, giving an incidence of 0.0779%. The incidence of hysterectomy following vaginal delivery was 0.0106% and that of cesarean hysterectomy 9.39%. Majority of the cases were unbooked (76.9%) and the incidence was highest in the age group of 26-35 years (65%). It was more common in parity three and four (57%). Morbid adherence of placenta was the commonest indication contributing to 26% of the cases. There was no maternal death in the study. **CONCLUSION** – Emergency obstetric hysterectomy is a rare operation (1 in 1283 deliveries). In spite of the intra-operative risks and post-operative morbidity, it remains a potentially life-saving procedure. With the help of newer drugs like prostaglandin, modern policies of active management of labor, timely performance of cesarean section and resort to procedure like uterine artery ligation, internal iliac artery ligation, compression sutures etc., obstetric hysterectomy should be made a more rare procedure.

Key words : obstetric hysterectomy

Introduction

The operation of obstetric hysterectomy was originally devised more than 200 years ago as a surgical attempt to manage life threatening obstetric hemorrhage and infection. Joseph Cavallini, Horatio Storer, Edward Porro, Lawson Tait etc. were pioneers in developing this operation¹. Newer drugs like prostaglandins, better antibiotics and availability of blood transfusion has brought down the incidence of obstetric hysterectomy. Obstetric hysterectomy is taken up as a last resort to save a mother's life. The decision is made when the condition of the mother is critical. Proper timing and meticulous care may reduce or prevent maternal complications.

Material and Methods

Twenty-six cases of obstetric hysterectomy performed over a period of five years from June 1996 to May 2001 were analysed with special emphasis on indications and maternal outcome. They were done at the time of cesarean section or following a vaginal delivery.

Results

There are 26 cases of emergency hysterectomies amongst 33371 deliveries during the period of five years giving an incidence of 0.0779%. The incidence following vaginal

delivery was 0.0106 and following cesarean section 9.39%. Twenty cases were unbooked (76.9%) and only six cases (23%) were booked. Sixty-five percent of cases were in the age group of 26-35 years (Table I).

The youngest patient was of 22 years and the oldest was of 39 years of age. Fifty-seven percent belonged to parity three or four while 19.1% were grandmultiparas.

Indications

Seven cases of morbidly adherent placenta required hysterectomy. Table II shows that previous cesarean section accounts for 71.4% of these cases. Out of seven cases, five were following cesarean section and two following vaginal delivery. Out of five postcesarean cases, three were associated with a major degree of placenta previa.

Out of six cases of ruptured uterus, three were due to obstructed labor, two were due to injudicious use of oxytocin and one had scar dehiscence. There were five cases of atonic PPH, four following cesarean section and one after vaginal delivery. All the atonic PPH cases had prolonged labor mismanaged at home. There were three cases of placenta previa in which the placental beds were bleeding profusely and needed emergency hysterectomy. Three cases of multiple injury at the fundus and lateral wall of the uterus during voluntary termination of early pregnancy (MTP) needed hysterectomy. In two cases, hysterectomy was done for extension of uterine incision during cesarean delivery producing broad ligament hematoma leading to disturbed anatomy and difficulty in identifying internal iliac artery.

Paper received on 19/07/03 ; accepted on 21/10/03

Correspondence :

Dr. R. K. Praneshwari Devi
Heirangoithong Bazar, P. O. Singjamel,
Imphal - 795008.

Table I : Relation of Age and Parity

Age (years)	Parity					Total
	1	2	3	4	5	
20-25	1	1	2	-	-	4
26-30	-	2	3	2	1	8
31-35	-	1	2	3	3	9
36-40	-	1	2	1	1	5
Total	1	5	9	6	5	26

Table II : Indications

Indication	No	Percentage
1. Morbidly adherent placenta	7	26.9
Post-cesarean	5	
Placenta Previa	3	
Placenta at normal site	2	
Placenta previa	1	
History of manual removal of placenta	1	
2. Ruptured uterus	6	23
Obstructed labor	3	
Oxytocin abuse	2	
Scar dehiscence of previous cesarean section	1	
3. Atonic PPH	5	19.2
Cesarean section for prolonged labor	4	
Vaginal delivery following prolonged labor	1	
4. PPH due to placenta praevia	3	11
5. Perforation during termination of early pregnancy	3	11
6. Extension of uterine incision during cesarean delivery	2	7.6

Table III Comparison With Reported Series

Author	Country	Incidence
Ambiye et al (1988) ⁵	India	0.12%
Chew and Biswas (1998) ²	Singapore	0.0392%
Sturdee and Rushton (1986) ¹	U. K.	0.05%
Present Series	India	0.0779%

Type of operation

Subtotal hysterectomy was performed in majority of the cases (20 cases) because by the time decision for hysterectomy was made the patients' conditions were too critical to perform total hysterectomy which requires more time. Total hysterectomy was done in six cases as there was profuse bleeding from the lower segment due to major degree of placenta previa.

Post operative complications

There were 10 cases of post-operative pyrexia followed by paralytic ileus in 3 cases. Two cases developed peritonitis and one developed vesico-vaginal fistula.

Discussion

The incidence of emergency obstetric hysterectomy in our study is 0.0781% which is comparable with 0.05% reported by Sturdee and Rushton¹ from UK and 0.0392% by Chew and Biswas² from Singapore. But from India Gupta et al³, have reported 0.26%, Kore et al⁴ 0.18%, and Ambiye et al⁵ 0.12%.

Our incidence of 0.078% is lower than that reported by these Indian authors. It may be due to the fact that most of the deliveries are conducted in the hospital following regular ante-natal check-up. In our study, the incidence of emergency hysterectomy following vaginal delivery is 0.0106% and that of cesarean hysterectomy is 0.39. These are quite comparable to 0.033% and 0.45% respectively reported by Pawar and Shrotri⁶. Our incidence of morbidly adherent placenta is 1:4910 deliveries, corresponds to 1:4220 reported by Pal et al⁷ but is lower than 1:1375 reported by Kamal and Wadia⁸.

Ruptured uterus is the second most common indication in our study accounting for 23% cases which is almost similar to 20% reported by Allahabadia and Vaidya⁹. 19.2% of our cases are due to atonic PPH which is similar to 16% reported by Allahabadia and Vaidya⁹. There was no maternal death in our series, neither was there any in the series reported by Sturdee and Rushton¹ from UK. Maternal mortality rates given by Indian authors are 9.3% by Ambiye et al⁵, 6.01% by Sinha and Mishra¹⁰ and 32% by Allahabadia and Vaidya⁹.

Emergency obstetric hysterectomy is a rare operation (1 in 1283 deliveries). It represents a painful dilemma

leading to major catastrophic occurrences in obstetric practice. Obstetric hysterectomy as a method of treatment is a radical procedure though it has a definite role in the management of life threatening obstetrical hemorrhages, uterine ruptures etc. In no obstetric surgery, is the surgeon so much in dilemma, as in deciding about emergency hysterectomy, as a last resort to save the life of the mother while her reproductive capability is to be sacrificed, more so if she is of low parity. With newer drugs like prostaglandin, antibiotics, easy availability of blood transfusion, good maternal care, modern policies of active management of labor, early recognition of complication, timely performance of cesarean section to avoid difficult vaginal delivery, obstetric hysterectomy should be made a rarer procedure.

References

1. Sturdee DW, Rushton DI. Cesarean and post-partum hysterectomy. *J Obstet Gynecol* 1986;93:270-4.
2. Chew S, Biswas A. Cesarean and postpartum hysterectomy. *Singapore Med J* 1998;39:9-13.
3. Gupta S, Dave A, Bandi et al. Obstetric hysterectomy in Modern Day obstetrics - A review of 175 cases over a period of 11 years. *J Obstet Gynecol Ind* 2001;51:91-3.
4. Kore S, Potwar S, Tamboli J et al. Obstetric Hysterectomy Analysis of 34 cases. *J Obstet Gynecol Ind* 2001;51:94-6.
5. Ambiye VR, Venkatraman V, Kudchadkar DB et al. Hysterectomy in Obstetrics. *J Obstet Gynecol Ind* 1988; 38: 318-21.
6. Pawar PA, Shrotri A. Role of Emergency hysterectomy in Obstetrics. *J Obstet Gynecol India* 1998;48:46-9.
7. Pal SK, Roy Choudhury NN. Cesarean hysterectomy - A review of 30 cases. *J Obstet Gynecol Ind* 1985;35: 829-31.
8. Kamal P, Wadia B J. Cesarean hysterectomy on the rise: A consequence of increased rate of cesarean section. *J Obstet Gynecol Ind* 1994; 44: 889-93.
9. Allahabadia GV, Vaidya P. Obstetric Hysterectomy - A review of 50 cases from January 1987 to August 1990. *J Obstet Gynecol Ind* 1991; 41:634-7.
10. Sinha HH, Mishra MG. Hysterectomy for obstetric emergencies. *J Obstet Gynecol* 2001;51:111-4.