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Original Research Article

Life Saving Obstetric Hysterectomy in Tertiary Care Hospital, Risk Factors and Indications

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Abstract

Maternal mortality ratio in India is 199per 100000 births, MMR in Rajasthan is 208 per 100000 live births and MMR in Udaipur is 284 per 100000 live births (2016) [1]. Leading causes include post partum hemorrhage (30%), sepsis, unsafe abortions, rupture of uterus and obstructed labor [2]. Emergency hysterectomy in obstetrics is rarely indicated and is always debatable but if performed timely and wisely can be life saving [3]. In the present study 24 cases (92.30%) belonged to age group of 26-35 years. 22cases (84.61%) belonged to Para 3 and 4. 14 cases (53.84%) required emergency obstetric hysterectomy to control atonic post partum hemorrhage . 6 cases (23.07%) were due to rupture of uterus , 4 case (15.38%) was due to sepsis 1 case due to cervical ectopic pregnancy. 20(76.92%) were unbooked cases with no antenatal care. There was no maternal mortality. Aim of the present study is to help reducing maternal morbidity and mortality and to suggest ways of improving maternal outcome.

Keywords: Obstetric hysterectomy, Emergency hysterectomy, Rupture uterus, Trauma to uterus, Septic abortion, Post partum hemorrhage.

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INTRODUCTION

Emergency hysterectomy has been considered as life saving procedure in obstetric hemorrhage since last 200 years [4]. With advent of potent drugs like prostaglandins, oxytocin, ergotamine, hemocoagulase (botroclot), tranexemic acid, blood transfusion and antibiotics, the requirement of obstetric hysterectomy has been brought down considerably [5]. Conservative approach like internal iliac artery ligation, hemostatic sutures on uterus, embolisation of uterine artery, is quite effective when ever available. Inspite of all this progress emergency hysterectomy still remains the life saving procedure and for better results it should be timed well and not done as last resort [6]. Post-partum hemorrhage remains an important cause of significant maternal morbidity and mortality throughout the world [7]. Uterine rupture is associated with clinically significant uterine bleeding, fetal distress, expulsion or protrusion of the fetus, placenta or both into the abdominal cavity, and the need for prompt cesarean delivery and uterine repair or hysterectomy [8]. The risk factors for rupture include previous cesarean sections, multiparity, malpresentation and obstructed labor, uterine anomalies, and use of prostaglandins for induction of labor. Previous cesarean section is.

however, the most commonly associated risk factor. The most consistent early indicator of uterine rupture is the onset of a prolonged, persistent, and profound fetal bradicardia. The signs and symptoms of uterine rupture are typically nonspecific, which makes diagnosis difficult. Delay in definitive therapy causes significant fetal morbidity. For the best outcome, vaginal birth after previous cesarean section needs to be looked after in an appropriately staffed and equipped unit for an immediate cesarean delivery and advanced neonatal support [9].

MATERIAL AND METHODS

This is a prospective observational study done in a Tertiary Care Center, hospital of PIMS (PACIFIC INSTITUTE OF MEDICAL SCIENCES, VILLAGE UMARDA, UDAIPUR, RAJASTHAN from 2014 to 2019. Women who underwent emergency peripartum hysterectomy after cesarean delivery or following vaginal birth due to severe post-partum hemorrhage and who did not respond to conservative treatment were included in the study. Primary outcomes included indications, risk factors, maternal morbidity, and mortality. Age, parity, socioeconomic status, education, age of marriage and residential address were noted. Complains and details of illness, obstetric history, medical and surgical history was noted. General examination included presence of anemia, blood pressure and edema. Systemic examination included cardiac and lung condition. Uterine height, presentation, position, contraction were noted. History of bleeding per vagina was recorded. Ultrasonic examination results were recorded. Blood HB, SUGAR, UREA, CREATININE, BLOOD COUNTS, BT, CT, PT, HIV, HBSAG VDRL, URINE SUGAR and ALBUMIN, BLOOD GROUPING results recorded. INDICATIONS, RISK FACTORS AND OUTCOME of emergency obstetric hysterectomy were recorded.

OBSERVATIONS

S.No	Age In Years	No Of Patients	Percentage
1	Less than 20	0	0
2	20-25	0	0
3	26-30	10	38.46
4	31-35	14	53.84
5	More than 36	2	7.70
		26	100

Table-1: Age distribution of cases of emergency obstetric hysterectomy

Table-2: Parity di	istribution of	cases of e	emergency of	obstetric h	ysterectomy
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S. No.	Parity	Number	Percentage
1	0	0	0
2	1	0	0
3	2	0	0
4	3	14	53.84
5	4	8	30.76
6	5	4	15.40
		26	100

S. No	Risk Factors	No	Prcentage
1	Pregnancy induced hypertension	20	76.92
2	Anemia	18	69.23
3	Ante partum hemorrhage, accidental and placenta previa	4	15.38
4	Post caesarean pregnancy	6	23.07
6	Twins	1	7.70
7	Induction of labor	4	15.38
8	Un Booked cases with no antenatal visits	20	76.92

Table-4: Indications of emergency obstetric hysterectomy

S.No	Indications	Number	Percentage
1	Atonic post partum hemorrhage		
	Normal vaginal delivery	2	7.70
	Caesarean delivery	4	15.40
2	Rupture uterus		
	Post caesarean preg		
	Misuse of oxytocic	4	15.40
	spontaneous	2	7.70
	Unscarred uterus		
	spontaneous	2	7.70
	Misuse of oxytocic	2	7.70
3	Placenta praevia	2	7.70
4	placenta acreta	2	7.70
5	Septic abortion	4	15.40
6	Cervical ectopic pregnancy bleeding	2	7.70
		26	100

RESULTS

24 cases (92.30%) belonged to age group of 26-35 years 22 cases (84.61%) belonged to Para 3 and 4. 20(76.92%) had pregnancy induced hypertension,18(69.23% had anemia, 4(15.38%) and ante partum hemorrhage, 6(23.07) were post caesarean pregnancies.1(3.84%) were twins and 4(15.38%) induced patients 14 cases (53.84%) required emergency obstetric hysterectomy to control uterine bleeding. 10 cases (38.46%) were rupture of uterus due to misuse of oxytocics and 2case (7.70%) were due to sepsis.



Fig-1: Accidental hemorrhage with couvelaire uterus



Fig-2: Placenta acreta with post partum hemorrhage

DISCUSSIONS

The incidence of peripartum hysterectomy is 4.1 cases per 10,000 births. Maternal mortality is 0.6% [10]. Previous cesarean delivery, maternal age over 35 years, parity of three or greater, previous manual placental removal, previous myomectomy and twin pregnancy were all risk factors for peripartum hysterectomy. The risk associated with previous cesarean delivery was higher with increasing numbers of previous cesarean deliveries Women undergoing a first cesarean delivery in the current pregnancy were also at increased risk. Earlier studies [11] revealed incidence of 0.04 %. Prior cesarean delivery was present in 88 % of the patients; a majority of the patients were grand multiparous, Para ≥ 6 (65 %). The incidence of hysterectomy after cesarean delivery was much higher than after vaginal delivery (0.3 vs. 0.01 %). Common indications included placenta accreta (65 %), uterine atony (27 %), and uterine rupture (8 %). The majority (64 %) had undergone total hysterectomy. Post-operatively, 25 patients (38 %) developed DIC, 32 (48.5%) had febrile illnesses, and 22 (33%) experienced injury to the urinary tract. The maternal mortality in other study was 4.5 % [12]. In another study [13] there were 18 cases of emergency hysterectomy (14 caesarean hysterectomy and four postpartum hysterectomy, after vaginal delivery), giving a rate of 0.36/1,000 deliveries. Overall, the most common indication for hysterectomy was placenta accreta (28%) and uterine atony (28%). Although there was no maternal death, intra- and postoperative complications were prevalent including cardiac arrest, disseminated intravascular coagulopathy, pulmonary edema, septicemia, and bladder injury [14]. Placenta accreta is becoming a leading cause of emergency postpartum hysterectomy [15]. Although hysterectomy is a life saving operation, it is associated with high maternal morbidity.

In the present study we did not have any maternal mortality. 20 (76.92%) were antenatal unbooked .24 cases (92.30%) belonged to age group of 26-35 years. 22cases (84.61%) belonged to Para 3 and 4. 14 cases (53.84%) required emergency obstetric hysterectomy to control uterine bleeding. cases (23.07%) were due to misuse of oxytocics and 1 case (7.70%) was due to sepsis. it has been observed in the present study that atonic post partum hemorrhage requires to be controlled in time. Multiparity big baby placenta praevia placenta acreta delayed and obstructed labor malnourished anemic compromised patient are the contributory factors. Uterine bleeding after MTP due to trauma to uterus are other factors. One interesting case cervical ectopic pregnancy also required of hysterectomy to control bleeding. Prevention lies in proper control of post caesarean normal delivery trials and mis use of oxytocics. A prompt and early decision to perform emergency hysterectomy can save life.

CONCLUSIONS

With the advent of prostaglandins, potent oxytocics, potent clotting factors, blood and blood products, newer antibiotics and newer conservative interventions requirement of emergency hysterectomy has markedly reduced, but this still remains life saving tool. Decision should not be delayed and will definitely reduce maternal mortality and morbidity. Regular ante natal care is the basic tools in identifying risk factors and prompt treatment.

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