ORIGINAL ARTICLE

Changing Trends In Emergency Peripartum Hysterectomy

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ABSTRACT

Introduction: EMERGENCY PERIPARTUM HYSTERECTOMY is a life saving procedure performed after spontaneous vaginal delivery or caesarean section, or in the immediate post partum period. Although rare in modern obstetrics, it still remains a life saving procedure in cases of intractable hemorrhage where conservative measures fail, although it itself is still associated with significant maternal mortality and morbidity even in developed countries.

Aims and Objectives: The aim of the present study was to determine the indications and complications associated with this procedure.

Study Design: This is a descriptive, observational and cross sectional study.

Settings: GYNAE UNIT 3, SIR GANGA RAM HOSPITAL.LAHORE

Population: All patients who underwent emergency peripartum hysterectomy after Caesarean or spontaneous vaginal delivery in Gynae unit 3 of Sir Ganga ram hospital during the study period from October 2010-October 2014 were included in the study.

Methodology: This was a prospective study and main outcome measures were frequency of emergency peripartum hysterctomy, age of the patient, gravidity, parity, and indications. Risk factors associated with emergency peripartum hysterctomy were observed and recorded. The intra and postoperative complications were also recorded.

Results: The frequency of EMERGENCY PERIPARTUM HYSTERCTOMY in our study was 0.1974%.The mean age and parity of patients was 29.836% and 4.55% respectively. The mean gestational age at the time of delivery was 30.08 weeks.33 (70%) patients had previous history of caesarean delivery. The main indications of EMERGENCY PERIPARTUM HYSTERCTOMY were abnormally adherent placenta in 23 (60%) cases. Uterine atony in 13(26%) of the cases. Placental bed bleeding in 11(22%) cases and uterine rupture in 5(10%) of the cases. 48(96%) EMERGENCY PERIPARTUM HYSTERCTOMY were total and 2(4%) were subtotal. 44(88%) were carried out after Caeserean section and 6(12%) after SVD. 8(16%) patients had urinary bladder injury and 4(8%) had broad ligament haematoma. All patients required blood transfusions. 44(88%) had haemoglobin less than 11gm/dl after 48 hours of EMERGANCY PERIPARTUM HYSTERCTOMY.7(14%)had ICU admission. 1(2%) had pulmonary oedema and 5(10%) had wound disruption. No maternal mortality was observed in our study.

Conclusions: The frequency of emergency peripartum hysterctomy was lower in our setup. The most common indication of emergency peripartum hysterctomy in our study was morbidly adherent placenta. All cases of Morbidly Adherent Placenta were associated with Placenta Previa and history of caesarean sections. There was no maternal mortality in our study. This could be explained by the fact that all emergancy peripartum hysterctomies were carried out by senior obstetricians.

So the recommendations are that better antenatal care, presence of experienced staff in emergency, early recognition and management of complications for example placenta previa and uterine atony and avoidance of unnecessary caesarean sections can decrease the incidence of abnormal placentation and placenta previa.

Key words: Emergency Peripartum Hysterectomy, Abnormal Placentation. Placenta Previa, Maternal morbidity, caesarean section.

INTRODUCTION

Emergency peripartum hysterectomy is defined as hysterectomy performed after caesarean or vaginal delivery or in the immediate post-partum period, in cases of intractable hemorrhage due to uterine atony, ruptured uterus and placental disorders, in situations where conservative measures fail to control hemorrhage.[1]

Obstetric hemorrhage is still a major case of maternal mortality and morbidity in developed and under developed countries. Even in UK and Ireland it was responsible for 12 deaths during 1994-1996.[2]

Emergency peripartum hysterectomy is a procedure that is associated with post operative morbidity and mortality especially in developing countries[16,17]. Although there are considerable differences in incidence in different parts of the world, depending upon availability of obstetric services and standards of antenatal care. The indications of hysterctomy have also changed over the recent years. Previous literature reported more emergency peripartum hysterctomy due to uterine rupture and uterine atony[3,4], but the incidence of uterine atony has decreased definitely due to better availability of different modalities and pharmacological agents for treatment of uterine atony for example Prosta glandin F2 and Prosta Glandin E2 analougs[5].

The emergency peripartum hysterctomy due to abnormal placentation have increased. This is due to high rate of caesarean sections and also due to repeat caeserean sections rate worldwide.[5,6]

The purpose of the present study was to determine the frequency, indications, risk factors and post operative complications associated with Emergency peripartum hysterectomy.

MATERIALS AND METHODS

This study was carried out in Gynae Unit 3 in , LAHORE SIR GANGA RAM HOSPITAL from October 2010 to-October 2014.

All the patients who underwent emergency peripartum hysterctomy after caesarean-section or SVD were included in the study. The maternal age, Gravidity, Parity, Gestational Age of Patient, indications for caeserean sections, associated risk factors and indications of emergency peripartum hysterctomy were recorded. Intra-operative and post-operative complications associated with this were also reviewed and recorded in the study.

RESULTS

During the four years period, total number of deliveries were (25,320). Out of which 10740(42.41%) were caesarean-section and 14,580 (57.58%) were SVDS. 50 cases of emergency peripartum hysterctomy were included in this study. 44(88%) were carried out after caesarean sections and 6(12%) were carried out after svds .The frequency of emergency peripartum hysterctomy in our study therefore was 0.194%.

Table 1: Profile of the Patients Undergone Emergency Peripartum Hysterectomy

AGE IN YEARS	**Number**	**Percentage**
21-25	4	8
26-30	26	52
31-35	16	32
36-40	3	6
PARITY		
2_3	12	24
4_6	35	70
□6	3	6
GESTATIONAL AGE AT DELIVERY IN WEEKS		
28 _36	28	56
37 _41	22	44
□41		
PREVIOUS MODE OF DELIVERY		
Vaginal delivery	6	12
Caesarean delivery	44	88
NUMBER OF PREVIOUS CAESAREAN DELIVERIES		

Number of Caesarean sections.	Number of patients	
1	4	8
2	15	30
3	10	20
4	4	8

Table 2: Indications for Peripartum Hysterectomy and Type of Hysterectomy (N=50)

INDICATION FOR PERIPARTUM HYSTERECTOMY		
Uterine Atony	13	26
Placenta Increta	12	24
Placenta Accreta	8	16
Placental bed bleeding	11	22
Placenta Percreta	3	6
Rupture Uterus	5	10
TYPE OF HYSTERECTOMY		
Total	48	96
Subtotal	2	4

Table 3: Indications for Caesarean Delivery (N=44)

Indications	Number	% age
Placenta Previa	30	68.2
Placental abruption	2	4.50
Previous surgery	3	6.80
Fetal Distress	3	6.80
Mal presentation	4	9.10
Rupture Uterus	2	4.50

Table 4: Perioperative Morbidity and Mortality

Intra Operative Complications	Number	% age
Urinary Bladder injury	8	16
Broad Ligament Haematoma	4	8
POST OPERATIVE COMPLICATION		
Blood Transfusion	50	100
Anemia	44	88
ICU Admission	7	14
Pulmonary oedema	1	2
Febrile illness	0	0
Wound disruption	5	10
No complication	37	74

The mean age of the patients was 29.836 while the mean parity was 4.55. The mean gestational age at the time of delivery was 35.08. (Table 1) Out of 44 patients, 4(9%) had a history of previous II caesarean sections,10(22.7%) had a history of previous III caesarean sections and 4(9%) had a history of previous IV caesarean sections.(Table)

The most common indication of emergency peripartum hysterctomy in our study was morbidly adherent placenta, i.e.; Placenta Accreta, Placenta Increta and placenta Percreta in 23(46%) cases.

(All the cases had 1, 2, 3 or 4 previous caesarean sections.)

Uterine Atony in 13 cases (6%), uncontrollable placental bed bleeding in 11 cases (22%) and ruptured Uterus in 5 cases (10%) All these 5 cases were referred from periphery.(Table 2)

The most common indication for c-section in our study was placenta Previa; 30(60%).Out of these 30 cases 24 (80%) had a history of previous surgeries while 6(20%) of the cases had Placenta Previa without history of previous surgery.(Table 2). There was no maternal mortality in our study. Frequency of intra and post operative complications is given in table 4.

48(96%) emergency peripartum hysterctomy were total abdominal hysterectomies and 2(4%) were subtotal hysterectomies. (Table 2), 4 patients

had svds and 1 had a history of previous 4 Caesarean sections. All patients presented with history of injudicious use of oxytocins by untrained personnel.

DISCUSSION

Emergency peripartum hysterctomy is a procedure that was reported by Horatio in 1869 (1) .Most obstetricians are involved in this procedure during their clinical practice for different causes that do occur frequently in gravid women during their reproductive lives. (7)

The frequency of emergency peripartum hysterctomy in the present study is 0.1974% per 1000 total deliveries. The incidence is much less as compared to that reported in the literature from developing countries. The reported rate of emergency peripartum hysterctomy in literature from developing countries is 0.4/1000-0.2/1000 deliveries.(8,9)

In a similar study in Abbotabad in 2009, the incidence of emergency peripartum hysterctomy was 0.42 %. (1).in a study in Qatar it is 0.48/1000 total deliveries.8 The UK obstetrician surveillance system reported an incidence of 4.1/1000 deliveries.(10)

This difference in incidence may be explained by different levels and standards of obstetric health care and the level of expertise available at the time of emergency. In our study 44(88%) were done after caesarean sections and 6(12%) after svds. This is also as documented in literature. (15).The most common indication of emergency peripartum hysterctomy in our study was abnormally adherent placenta I e. 23(46%) cases. This is also reported similarly in different studies in literature(11).Majority of the patients who underwent hysterectomy were in the age group 26to 30 years and most of them were multipara same is also reported in lit(13,14)

In our study, the most common incidence of caesarean sections was Placenta Previa out of these 30 cases, 24(80%) were having H/0 previous caesarean sections and 6(20%) cases were presented without any history of surgery. Several investigators have also reported that increased incidence of EMERGENCY PERIPARTUM HYSTERCTOMY among women with previous caesarean sections and women with placenta previa ie. 44% and 52% respectively. (5). Another study reported that the incidence of morbidly adherent placenta (morbidly adherent placenta) has been increased from 0.5-3.9%(. 4)

In our study 13% of the cases were due to uterine atony. It is also reported in literature that the incidence of emergency peripartum hysterctomy due to uterine atony has declined from 42-29.3% and incidence of abnormal placentation has increased from 25.6 to 41.7%. This is explained due to increased rate of caesarean sections worldwide and better treatment of uterine atony with PG preparations during the last two decades and the well known risk factors for Morbidly Adherent Placenta are Placenta Previa and previous caesarean birth. Thus EMERGENCY PERIPARTUM HYSTERCTOMY has been recommended as a life saving procedure for Morbidly Adherent Placenta (11,12)

In our study 48(96%) emergency peripartum hysterctomy, were total and only 2(4%) were the subtotal. The study concluded that most of the hysterectomies were done due to Placenta Previa and it has been reported in literature that subtotal hysterectomy leaves the cervical branch of uterine artery intact so it will not control the bleeding. (3)

So the total abdominal hysterectomies done in our study were justified.

The maternal mortality reported in our study was nil. This may be explained by the early recognition and identification of cases of placenta Previa by experienced staff, presence of better ultrasound facilities. All the hysterectomies in the study were carried out by senior and experienced obstetricians.

So conclusively it is recommended that all the indications of caesarean sections are reviewed by senior obstetricians so only the unavoidable caesarean sections take place thus reducing the incidence of Morbidly Adherent Placenta and hence EMERGENCY PERIPARTUM HYSTERECTOMY.

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