

Feto Maternal Out Come in Peripartum Hysterectomy at Tertiary Care Center

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1. Introduction

Postpartum hemorrhage (PPH) is a life threatening condition. Various drugs and surgical techniques have been developed over time, especially to preserve the uterus. However, in some circumstances, an emergency peripartum hysterectomy has to be performed often as the last resort in saving a woman's life. It is thus an unequivocal marker of severe maternal morbidity and mortality.[1, 2] We have reviewed all peripartum hysterectomies done at our institute over a period of 4 year with the aim of determining the incidence, surgery, and anesthesia-related management issues. perioperative and postoperative complications

Aims and Objective

The aim of this study was to determine the incidence, surgery and anesthesia related issues of peripartum hysterectomies.

Inclusion Criteria

The study included all women who underwent peripartum hysterectomy in vims during the study period.

2. Material and Methods

- The present study included all women who underwent peripartum hysterectomy in the Department of Obstetrics and Gynaecology at VIMS. Over a span of 4 year and 6 months.
- Records of all women who underwent peripartum hysterectomy were collected from medical record department.
- Each case file was studied in detail for demographic profile, clinical characteristics, operative notes for indications, intraoperative findings, duration of surgery and blood loss, anesthesia records, and postoperative events. The data was presented as frequency or mean \pm standard deviation.

3. Results

Total no of delivery-39028

Total no of peripartum hysterectomy-24

Incedence of peripartum hysterectomy- 0.61/ 1000 delivery

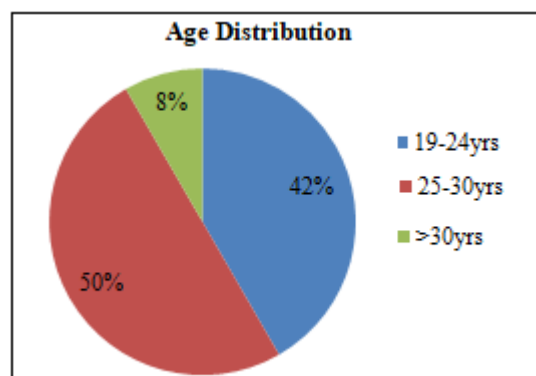
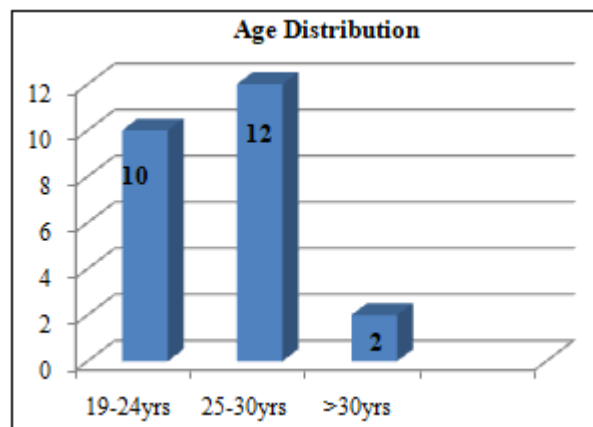
Most of the cases distributed in the age group of 25 to 30 years (50 %) 41.7 % are belong to 19-24 yr, only 8.3 % are belong to more than 30 yrs. (Table-1). Parity of the cases are distributed equally among the prime, gravid 2, 3. (25 %) (table no-2). Most of the peripartum hysterectomy 66 % of cases are due to atonic pph, placenta accrete and rupture uterus accounts for 16.66 % respectively (table no -3). 79.2

% of the cases are operated within 1-2 hours, 16.7 % of the cases are took more than 2 hours, 4.2 % of cases had prolonged duration of surgery more than 3 hours (table no -4). Mean pre operative haemoglobin was 9.46 ± 2 gm % and post operative haemoglobin 7.7 ± 3.1 gm %, Mean duration of surgery was 2.20 ± 1.5 hours, Number of intra-operative blood transfusions was 3 pints, total duration of ICU stay 3 days. Mean duration of hospital stay is 6 days (table no-5).in this study history of previous LSCS is 33 % and previous two LSCS 4 % (table no-6). Mean duration of period of gestation 75 % belongs to more than 34 weeks, and 25 % of the cases are belongs to less than 34 weeks of gestation (table no -7). Post operative complications includes, febrile morbidity 50 %, bladder injury 4 %, wound infection 12.5 %, urinary infection 4 %, DIC 8.3 %, maternal death 25 %.

Age Wise Distribution

Table 1

Age in Years	Frequency	Percent
19-24	10	41.70 %
25-30	12	50.00 %
>30	2	8.30 %
Total	24	100



Parity Distribution

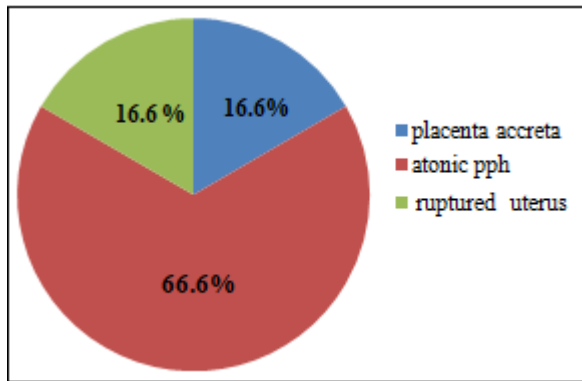
Table 2

	Frequency	Percent
primi gravida	6	25
gravida 2	6	25
gravida 3	6	25
gravida 4	4	16.7
>more than 5	2	8.3
Total	24	100

Indications of Peripartum Hysterectomy

Table 3

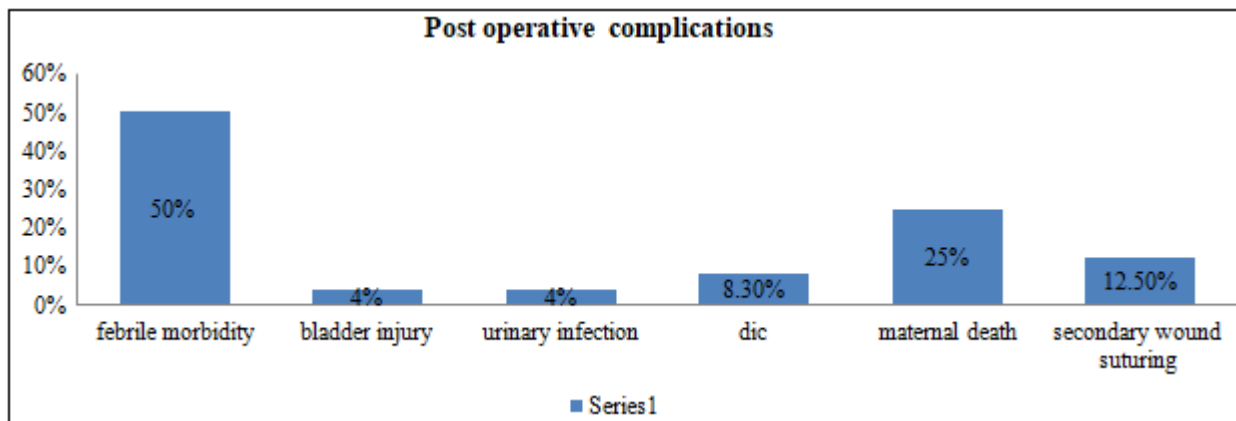
Indication	Number of patient	Percentage
Placenta Accreta	4	16.66 %
Atonic PPH	16	66.66 %
Ruptured Uterus	4	16.66 %



Duration of Surgery

Table 4

Duration of Surgery in Min	Frequency	Percent
60-119min	19	79.2
120-179min	4	16.7
>180min	1	4.2
Total	24	100



Maternal Death

	Frequency	Percent
Maternal Death	6	25.0
No Maternal Death	18	75.0
Total	24	100.0

Clinical characteristics of cases

Table 5

Clinical characteristics	Mean±SD
Preoperative hemoglobin (g/dl)	9.46±2
Duration of surgery (h)	2.20±1.5
Number of intra-operative blood Transfusions	2.58±0.6
ICU stay (days)	2.54±0.5
Postoperative hemoglobin (g/dl)	7.7±3.1
Duration of hospital stay in days	5.7±0.8

Table 6

Previous cesarean sections	number
1	8 (33 %)
2	1 (4 %)

Gestational Age (Weeks)

Table 7

Gestational age (weeks)	number
<27	0
28-34	6 (25 %)
>34	18 (75 %)

Postoperative Complications

Table 8

Complication	Number of patients
Febrile morbidity	12 (50 %)
Bladder injury	1 (4 %)
Wound infection	3 (12.5 %)
Urinary infection	1 (4 %)
Disseminated intravascular coagulation	2 (8.3 %)
Maternal death	6 (25 %)
Secondary wound suturing	3 (12.5 %)

4. Discussion

The incidence of peripartum hysterectomy is increasing in this era not because of improperly managed third stage of labor or obstructed labor but most likely because of increasing incidence of cesarean sections. Chances of repeat cesarean sections thus increase. This ultimately increases the incidence of placenta previa and accrete²

- In recent studies, the incidence of peripartum hysterectomy was higher in women who had a history of either one or two previous cesarean sections. Placenta accreta has been the primary indication in these women and accounts for 16.66 % of all peripartum hysterectomies.
- In our study, the most common indications of peripartum hysterectomy were PPH (66.6 %) placenta accrete (16.6 %), rupture uterus (4 %). In our study, there were 6 maternal deaths (25 %). All of these women were referred from outside, and the cause of death was atonic PPH.
- There is also a change in the indications of peripartum hysterectomy in the past two decades with placenta accrete being the commonest. This is because of rising number of cesareans and early diagnosis by imaging.
- Patients who underwent emergency peripartum hysterectomy due to atonic PPH is higher in our study had a higher mortality Whiteman MK, Kuklina E et al¹ Peripartum hysterectomy 0.77 per 1, 000 deliveries: repeat cesarean, 8.90 % primary cesarean, 6.54 % and vaginal birth after cesarean, 2.70 % Multiple births were associated with an increased risk compared with singleton births this is similar to our study.
- Omole-Ohonsi A, Olayinka HT² (2012) et al Conducted a study of 30 patients who underwent EPH between June 1, 2003, and 31 May 31, 2008, at Aminu Kano Teaching Hospital, Kano, Nigeria, a tertiary institution in a developing country. The rate of EPH in this study was 4.0 per 1000 deliveries. Ruptured uterus is most common. This is compairable to our study.
- Wei Q, Zhang W, Chen et al³Emergency peripartum hysterectomy: 2-year experiences. There was a correlation between peripartum hysterectomy and uterine atony or uterine rupture (1.2 per1000 deliveries.). The results of this study showed the most important risk factors associated with peripartum hysterectomy to be uterine atony, grand multiparity, and uterine rupture.

References

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