# **Review of Peripartum Hysterectomy cases in five years**

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## Abstract:

*Aim:* To review all the cases of Peripartum Hysterectomies done between the years 2010 to 2014 at Sree Balaji Medical College & Hospital, Chrompet, Chennai.

*Materials & Methods:* This is a retrospective study. List derived from Parturition Register & case details from the Case Sheets. An analysis of cases of Peripartum Hysterectomy done for over a period of five years. i.e. from 2010 to 2014 at Sree Balaji Medical College & Hospital, Chrompet, Chennai. The data collected is analyzed for Incidence, Risk Factors, Indications, Complications and Outcomes of these cases.

**Background:** Peripartum hysterectomy is performed as a life saving adjunctive procedure. Peripartum hysterectomy are performed to control Hemorrhage. General Incidence is 0.25 to 0.8/1,000 deliveries.

**Results:** During the study period, Peripartum hysterectomy complicated six deliveries out of 8,436 deliveries. (0.71/1000). Independent risk factors for Peripartum hysterectomy in our study were previous caesarean section with placenta previa, over distended uterus, gestational hypertension and anaemia. The following outcomes were significantly higher in the peripartum hysterectomy group: operative time, Blood Loss, Hypovolemia, Coagulopathy, Tranfusions, Febrile morbidity, re-laparotomy and duration of hospitalization.

**Conclusions:** Emeregency Obstetric Hysterectomy though uncommon, remains a potentially life saving procedure.

Keywords: peripartum, hysterectomy, placenta previa.

## I. Introduction

Peripartum hysterectomy is an infrequent, usually life saving procedure, reserved mostly for cases of intractable obstetric haemorrhage. Classical Indication for peripartum hysterectomy are Life threatening Hemorrhage and Infection. General Incidence of Peripartum hysterectomy : 0.25 - 0.8 / 1000 deliveries. Due to advent of Broad Spectrum Antibiotics and improved drugs and procedure for controlling hemorrhage there is a Decline in Incidence in Peripartum hysterectomy

### II. Objective

To review all the cases of Caesarean Hysterectomies done between the years 2010 to 2014 at Sree Balaji Medical College & Hospital, Chrompet, Chennai.

### III. Materials & Methods

This is a retrospective study. List derived from Parturition Register & case details from the Case Sheets. An analysis of cases of Peripartum hysterectomy done for over a period of five years. i.e. from 2010 to 2014 at Sree Balaji Medical College & Hospital, Chrompet, Chennai. The data collected is analyzed for Incidence, Risk Factors, Indications, Complications and Outcomes of these cases.

## IV. Results

There were total number of 8,436 deliveries in the study period at our hospital, of which there were 6 Emergency Obstetric Hysterectomies done.

The rate being 1 in 1,238 deliveries (0.08%)

Incidence in Sree Balaji Medical College & Hospital: 0.81/1000 deliveries

The Average age was 25.5 years in the 6 peripartum hysterectomy cases. Average pre-pregnant body mass index was 25.5 kg/sq.m. All the patients were unbooked. All of them belonged to low socioeconomic class. Except for one who was primigravida, rest of the others were multigravidae. Two patients were preterm, rest of the four were full term gestation.[Table 1]

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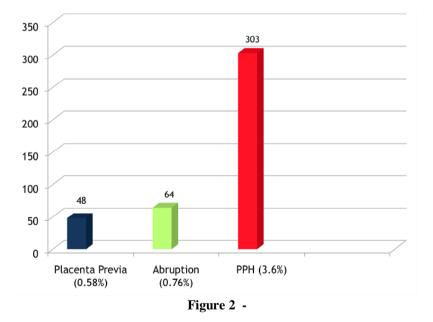
AGE	BOOKED /UNBOOKED	SOCIO ECONOMIC CLASS	BMI (PRE PREGNANT)	PARITY	GESTATIONAL AGE (WEEKS + DAYS)
26	Unbooked	IV	24	G3P2L2	38 + 3
27	Unbooked	IV	22.4	G2P1L1	36 + 4
22	Unbooked	IV	31.1	PRIMI	37 + 3
24	Unbooked	IV	25	G2P1L1	34 + 1
24	Unbooked	IV	23.2	G2P1L1	38
30	Unboked	IV	28	G3P2L2	37

#### Table 1

Of the total number of deliveries , 2,269 women had caesaraen section. (26.9%)[Figure -1] Of the total number of deliveries, 48 had Placenta previa (0.58%), 64 – Abruption (0.76%), 303 – Atonic Postpartum Hemorrhage (3.6%) and 6 underwent PERIPARTUM HYSTERECTOMY (0.8%) [Figure -2]



Figure – 1 – 26.9% had caesarean deliveries



Commonest risk factor noted were Placenta Previa with previous caesarean section (66.6%), Anaemia (83.3%), Gestational Hypertension (33.3%), Over distended Uterus (16.6%), Abruption (16.6%) and all the patients had moderate anemia with Mean Hemoglobin – 7.5g/dl. 5 patients presented with Ante Partum Hemorrhage at the time of admission, 1 had Abruption and 4 had Placenta Previa. 1 patient with gestational hypertension and twins was admitted for safe confinement. All of them underwent Peripartum hysterectomy. [Table 2]

The Common Indication for Peripartum hysterectomy are ATONIC POST PARTUM HEMORRHAGE (66.6%)

Table 2							
RISK	PRE OP Hb (g%)	INDICATION FOR CAESAREAN	TYPE OF CAESAREAN	INDICATION FOR HYSTERECTOMY	TYPE OF		
FACTORS					HYSTERECTOMY		
2 LSCS, Placenta Previa	8	Placenta Previa	Emergency	Atonic PPH	Total		
1 LSCS, Placenta Previa	7.5	Placenta Previa	Emergency	Placenta Accreta	Total		
Twins, Gest HTN	8	1st twin in non cephalic, imminent symptoms	Emergency	Atonic PPH	Subtotal		
1 LSCS, Placenta Previa, Gest HTN	7	Placenta Previa	Emergency	Atonic PPH	Subtotal		
1 LSCS, Placenta Previa	7.6	Placenta Previa	Emergency	Placenta Accreta	Total		
Anaemia	7.8	Abruption	Emergency	Atonic PPH	Subtotal		

After failed medical therapy with prostaglandins, Ergometrin and Syntocinon and Failed conservative B lynch brace sutures and selective devascularization.

3 underwent Total Hysterectomy ( Central Placenta Previa ) ( 50 %) and 3 underwent Subtotal Hysterectomy ( 50% )[Table 2]

Per operative Complications	No.of patients (n=6)	Percentage	
Bladder Injury	2	33.3%	
Increased Blood Loss	6	100 %	
Severe hypotension with cardiac arrest	1	16.6%	
DIC	4	66.6%	

Table 3 – Per operative complications

Post opertively patient was managed with Inotropic infusion (33.3%), Ventilatory support (33.3%), ICU Care (100%), Massive blood & component transfusions (83.3%), Prolonged bladder catheterizations (100%) and Prolonged hospital stay (83.3%)

Outcome was 1 fetal death due to abruption. Otherwise all patients recovered well and discharged in stable condition.

#### V. Discussion

Peripartum hysterectomy is the hysterectomy done in the same surgical case as Caesarean delivery. It was first done by Horatio Storer in 1869, revolutionizing the management of obstetric emergency so as to decrease maternal mortality[1]. It is classified as Emergent, Indicated non emergent, elective sterilization. The indications for Emergency cases are Uterine Hemorrhage, Placental Problems, Uterine rupture, Postpartum atony, Chorioamnionitis. [2] The indications for Indicated non emergent cases are Leiomyomata Uteri, Cervical Intraepithelial Neoplasia, Adnexal Disease. From 1986, no cases of Peripartum hysterectomy was performed for elective sterilization. Surgical pitfalls are Anatomical & Physiological changes in pregnancy, the vessels supplying uterus, ovaries & Bladder are larger & tortous, Meticulous care in surgical techniques viz. suture placement, Scarring from previous surgery – Caesarean, Uterine Trauma / Rupture of Hematoma and Careful exposure, Skilled Assistance, Attention to Hemostasis. Complications during peripartum hysterectomy are Post operative Hemorrhage, [3] Bladder Laceration, Ureteral Injury, Fistula, Thromboembolism, Maternal Mortality. In other studies rupture uterus was commonest indication as shown by Sinha et al (69.9%) [4], Mantri et al (67.28%) [5], Pawar (40%) [6], Sahu et al (38.8%)[7], Gupta et al (69.7%)[8], Kore et al (38.2%)[9], and Pati et al(64.4%)[10]. Morbid adhesion of placenta accounted for 33% of cases in the present study, whereas it accounted for 26% in the study of Praneshwari Devi et al[11].

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