

## Peripartum Hysterectomy in a Tertiary Care Centre

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### Abstract:

Peripartum Hysterectomy is performed at the time of delivery or at any time from delivery to discharge. The study was conducted retrospectively for a period of 6 months from July 2022 to December 2022. Abnormal placentation was the most common cause.

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### Introduction

Peripartum Hysterectomy is performed at the time of delivery or at any time from delivery to discharge. Emergency Peripartum hysterectomy although relatively rare in present day obstetrics, is a lifesaving procedure in the event of massive postpartum hemorrhage. [1,2]

Peripartum Hysterectomy is a near miss event, an intervention performed in life threatening situation to prevent death. It results in loss of fertility and associated with significant maternal mortality and morbidity. [3]

### Materials and Methods

The study was conducted retrospectively on cases in whom Peripartum hysterectomy was performed either as an elective procedure or emergently at Government Rajaji Hospital, Madurai for a period of 6 months from July 2022 to December 2022. Demographic details like patients age,

parity, gestational age, pre operative diagnosis, intra operative complications, duration of surgery, blood loss, no. of blood products transfused, ICU stay, post operative complications were analysed. Complications in elective and emergency peripartum hysterectomy were analysed. [4,5]

### Results

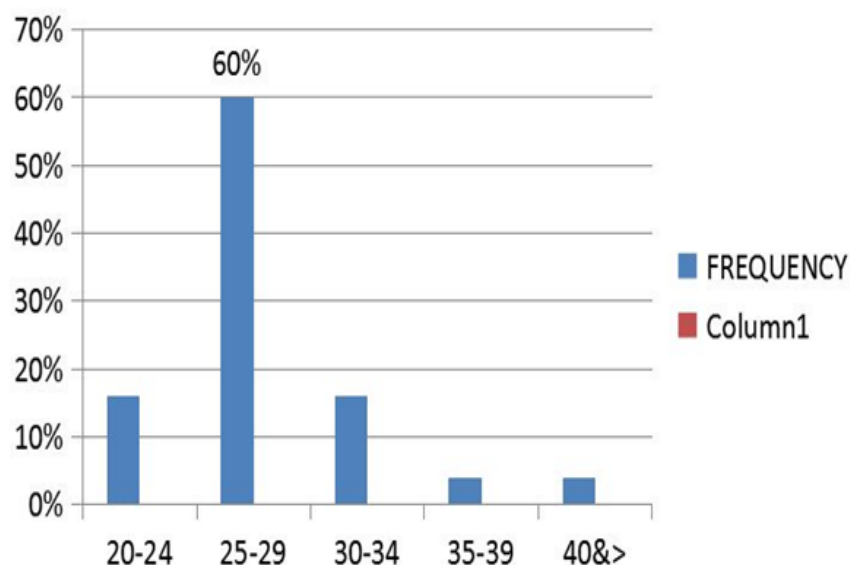
During the study period 25 women underwent Peripartum hysterectomy. The incidence was 3.14 per 1000 deliveries. In 8(32%) cases Peripartum Hysterectomy was done for Placenta accreta and complete placenta previa. Relaparotomy after LSCS was done for internal hemorrhage in 4(16%), for secondary PPH in 2(8%), 4 case of uterine sepsis (16%), mostly referred from Headquarters hospital, PH. Emergency Peripartum hysterectomy was done for atonic PPH for 5(20%). There were two cases of rupture uterus 2(8%).

### Indications for Peripartum Hysterectomy

Elective peripartum Hysterectomy	Placenta Acreta, Placenta Increta, Complete Placenta Previa	8(32%)
Emergency Laparotomy Following Vaginal Delivery	Atonic PPH Inversion of Uterus	3(12%) 1(4%)
Emergency Laparotomy	Rupture Uterus	2(8%)
Emergency LSCS	Atonic PPH- Proceeded To Hysterectomy	1(4%)
Relaparotomy After LSCS	Internal Haemorrhage	4(16%)
	Secondary PPH-	2(8%)
	Uterine sepsis	4(16%)

#### • Age Wise Distribution

The mean age was 27 years(21 to 41 yrs).



#### Childbirth preceding hysterectomy

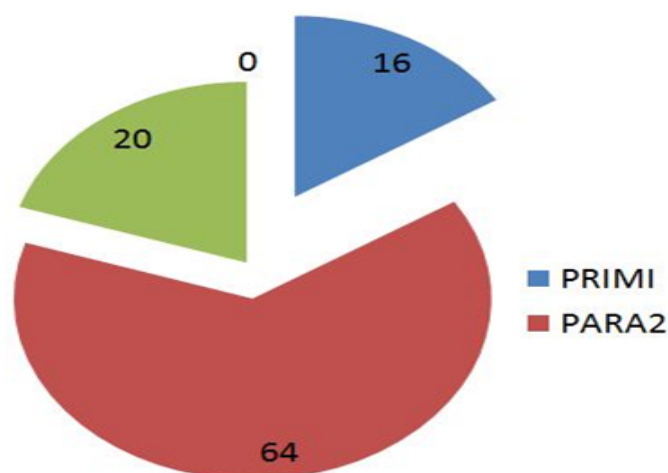
- 84% of them were multiparous. The most common childbirth preceding hysterectomy was LSCS. Almost 72% of them had at least 1 previous LSCS. 10 cases (55%) had previous 2 LSCS, 1 (5%) had previous 3 LSCS.

- Except 1 (1 Curettage), all cases of placenta acreta, increta had at least 1 previous LSCS.

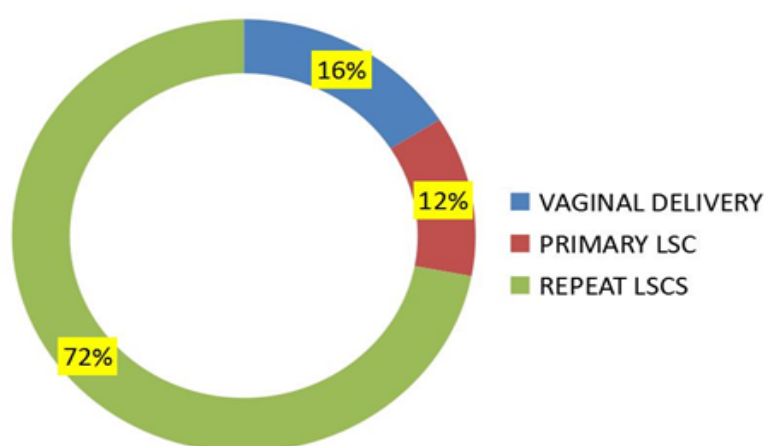
#### Type of Hysterectomy

- Total hysterectomy-20 (80%) was performed more commonly than subtotal hysterectomy. 5(20%)

#### Parity



### Mode of Delivery

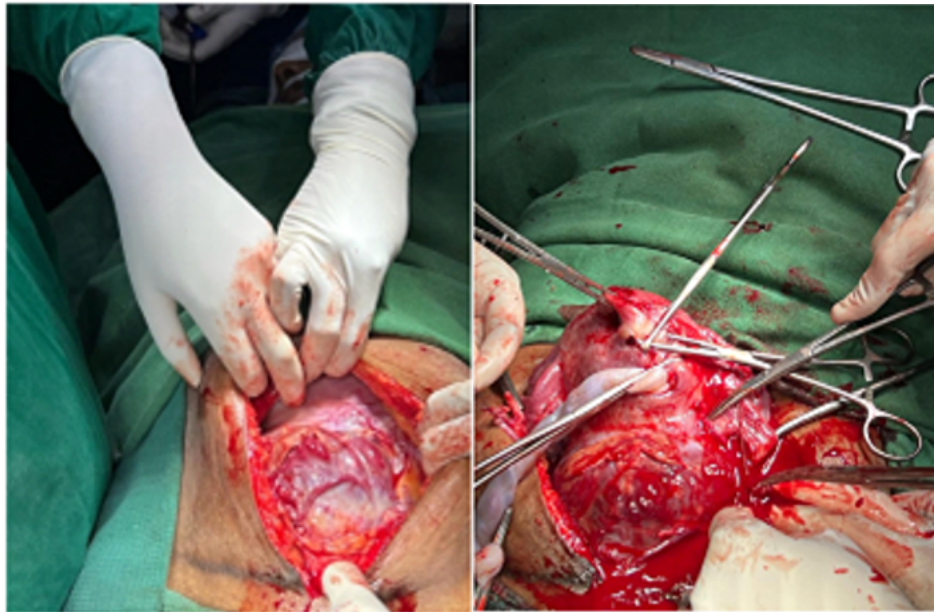


	ELECTIVE mean+_sd	EMERGENCY
ESTIMATED BLOOD LOSS	3.4+_0.5 L	3+_0.7 L
TOTAL PACKED CELL TRANSFUSION	3+_1.3	2+_1.8
TOTAL DURATION OF SURGERY	135+_30 MIN	120+_25.2
ICU STAY	3.75+_2.8	3.8+_1.9
TOTAL HOSPITAL STAY	12.6+_4.3	14.06+_4.21
MATERNAL MORTALITY	NIL	2(11.1%)
NEONATAL MORTALITY	1(12.5%)	3(16.6%)
FEBRILE MORBIDITY	4(50%)	8(44.4%)
BLADDER INJURY	1(12.5%)	1(12.5%)
BOWEL ADHESION	NIL	2(8%)
PELVIC COLLECTION	1(12.5%)	NIL

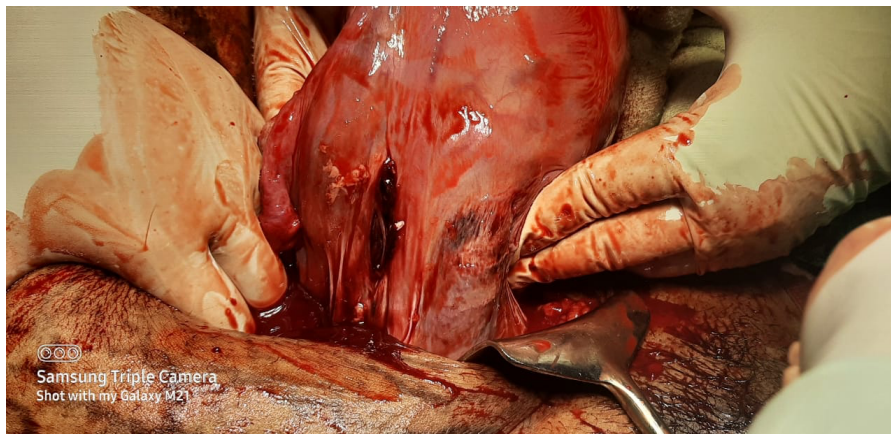
### Placenta Accreta Intra Op

Anitha *et al.*

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**Broad Ligament Hematoma**



**Secondary PPH**



## Discussion

As ours is a tertiary care centre, the peripartum hysterectomy rate was higher, 3.14 per 1000 deliveries.

Most of the patients were in the age group of 25 to 29 years (60%), 16% of them were Primipara.

Abnormal placentation was the most common cause. All cases of Morbidly adherent placenta and complete placenta previa were diagnosed antenatally by USG and MRI and planned Elective Peripartum Hysterectomy was performed except in one case which was a type 2 placenta previa which was adherent.

## Increased Risk in Previous LSCS

The most common type of childbirth prior to Peripartum hysterectomy both in the elective and emergency group was a Caesarean section 72%. The United Kingdom Obstetric Surveillance Study (UKOSS) has concluded that risk of EPH increases with increased no of previous C sections.

## Atonic PPH

Though atonic PPH contributed to 20%, only 1 case had delivered in our hospital, the others were referred cases. The prophylactic use of uterotonics, tranexamic acid and mechanical suction cannulas (SR cannulas), bilateral uterine artery ligations and other conservative surgical methods have reduced peripartum hysterectomy. Associated Coagulopathies and DIC are contributory factors.

## Puerperal Sepsis

Puerperal sepsis contributed to 16% of cases which is higher than other studies. Risk factors included obstructed labor, prolonged labor. With proper and judicious use of broad spectrum antibiotics and labor ward protocols puerperal sepsis can be prevented.

## Maternal Complications

All of them required multiple blood and blood products transfusion and ICU

admission and multidisciplinary management. The commonest intra operative complication was bladder injury. 2 (8%). Bowel adhesions occurred in 2 (8%).

Febrile morbidity occurred in 12 (48%). Pelvic collection occurred in one patient which was managed conservatively. Maternal mortality was in 2 cases (8%). Neonatal mortality was in 4 (16%).

## Maternal Mortality-2

In spite of multidisciplinary team approach with liberal availability of blood and blood products we had 2 maternal deaths due to late referral. One was a case of P2L2, Emergency Rpt LSCS done for severe preeclampsia with HELLP syndrome went in for irreversible Hemorrhagic shock on POD 1 and was referred, EPH was done with ongoing correction of DIC. The other was a case of irreversible hemorrhagic shock following internal hemorrhage following Repeat LSCS.

## Conclusion

Peripartum hysterectomy is a lifesaving procedure which all obstetricians should be well versed. Emergency Peripartum hysterectomy is done when all conservative modalities fail and interventional radiology is not readily available.

Primary c section auditing in institutional deliveries and effective contraceptive usage can reduce Peripartum hysterectomy. Reducing the Primary LSCS is a key to reduce the incidence of peripartum hysterectomy.

## References

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