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EMERGENCY PERIPARTUM HYSTERECTOMY A RETROSPECTIVE STUDY IN A TERTIARY HEALTH CARE CENTRE

Gynaecology

Dr Sumant R. Shah Professor & HOU Dept of obs & gynec, CHA

Dr Aastha Mehra Resident in Dept of obs & gynec, CHA

Dr Vishrut Shah MBBS

KEYWORDS

INTRODUCTION

Emergency peripartum hysterectomy refers to the surgical removal of pregnant or recently pregnant uterus. It is a major surgical venture performed immediately after or within 24 hours of caesarean or vaginal delivery. This procedure is performed in life threatening conditions when all the conservative measures have failed,and is rightly considered a "near miss" event.[1-3] This life saving procedure has been in use since 100 years. Edward Porro (1876) published the first case report of this procedure.

MATERIALS & METHODS

This is a retrospective ,observational study done in Civil Hospital, Ahmedabad over a period of one and a half year(August 2015 to april 2017). All women, either booked or unbooked, who underwent peripartum hysterectomy at CHA during the study period were included. Each case was analysed with emphasis on parity, characteristics of the present pregnancy and mode of delivery, indications of hysterectomy, operative and post op complications, maternal and fetal outcome.

A structured questionnaire was developed to collect data for analysis.

RESULTS AND DISCUSSIONS

There were 32 cases of peripartum hysterectomy, out of 10500 deliveries (both caesarean and vaginal deliveries)in this institute during the study period. An incidence of 3 per 1000 deliveries.

Incidence rate as per urban and rural area.

	No. of Patients	Incidence (%)
Urban	9	28
Rural	23	72
TOTAL	32	100

- In my study **72%** of patients were from **rural** area and **28%** of patients belonged to urban area. The cause of peripartum hysterectomy in patients from rural areas was mainly atonic pph and rupture uterus, while in patients from urban areas was mainly morbidly adherent placenta. Ours being a referral center, patients from rural area were referred from peripheral centres, majority of these patients were not taking regular ANC, reason being ignorance, illiteracy and non availability of adequate health service nearby.

Obstetric hysterectomy & mode of admission		
Type of Patient	No. of patients	Incidence (%)
Booked	10	31
Emergency	22	69
TOTAL	32	100

- In my study **69%** of patients were admitted as emergency cases whereas only **31%** of patients were booked cases. Majority of patients were not booked. Proper antenatal care can significantly reduce the need for obstetric hysterectomy.

Relation of peripartum hysterectomy with maternal parity

	Present Study n=32	
No. of delivery	No. of cases	Incidence (%)
1	4	12.5
2	7	21.8
≥3	21	65.6
TOTAL	32	100

- In present study **65.6%** cases were ≥3 para. This shows incidence of obstetric hysterectomy increase with increasing parity.
- With increasing parity there is increase in incidence of obstetric hysterectomy, as the chances for atonic PPH, placenta previa and rupture uterus increases.

Obstetric Hysterectomy & Mode of delivery

Mode of delivery	No.of cases N=32	% of cases
LSCS	20	62.5%
VAGINAL DELIVERY	12	37.5%

More common in patients after cesarean delivery because of associated abnormal placentation and previous caesarean section. The indications for obstetric hysterectomy in patients having delivery by caesarean section were morbidly adherent placenta and placenta praevia. Atonic pph and rupture uterus were the main causes in vaginally delivered.

INDICATIONS OF OBSTETRIC HYSTERECTOMY			
Sr. No.	Indications	No. of cases, n=32	Incidence (%)
1	Morbidly adherent placenta	12	37.5
2	Atonic PPH	8	25
3	Rupture uterus	6	18.7
4	Placenta praevia	5	15.6
5	Accidental hemorrhage	1	3.1

In present study the major indication for obstetric hysterectomy was morbidly adherent placenta accounting for 37.5% of cases followed by atonic PPH 25% of cases and rupture uterus 18.7% of cases.

Morbidly adherent placenta includes placenta accreta(5),increta(3) and percreta (4). 1 patient had history of previous three caesarean sections, 5 patients had previous two caesarean section,3 had previous one caesarean section, 1 had history of myomectomy and 2 patients had history of D&E.

Atonic PPH was the second most common cause. All the patients had vaginal delivery. PPH was mainly due to associated conditions like jaundice, severe pre eclampsia, thrombocytopenia, multiparity, severe anaemia and changes of DIC. These patients had atonic PPH even after correction of coagulopathy before delivery.

Intrauterine packing was attempted in 5 patients (62.5%), bilateral uterine and internal iliac artery ligation was done in 1 patient (12.5%), to stop bleeding before deciding for obstetric hysterectomy.

Atonic PPH incidence can be decreased by prompt use of oxytocics and active management of third stage of labour.

Rupture uterus was the third most common cause of obstetric hysterectomy.

ETIOLOGY OF RUPTURE UTERUS IN PRESENT STUDY

Sr. no.	Aetiology of rupture uterus	No. of cases (n=6)	%
1	Previous 1 LSCS	2	33.3
2	Previous two or more LSCS	3	50
3	Obstructed labour	1	16.6

In present study 83.3% of patients having rupture uterus had history of previous caesarean section(s).Only one case had rupture uterus due to obstructed labour. The patient was multigravida and was referred from periphery. In modern obstetrics rupture uterus because of obstructed labour has become a rarity as no obstetrician will pull on the labour to an extent that patient will go for rupture uterus. As compared to this the incidence of rupture of previous scar has been increased much more because the incidence of caesarean section has increased.

1 patient had abruption with IUD and acute kidney injury. Hysterotomy was done and per op couvelaire uterus with uncontrolled hemorrhage was present for which obstetric hysterectomy was done. After undergoing repeated hemodialysis she was discharged, preventing the mortality. This further emphasises the importance of timely intervention.

Out of 32 cases, subtotal hysterectomy was performed in 28 (87.5%) cases and 4 patients underwent total hysterectomy. The duration and amount of blood loss(calculated from the number of mops utilised and amount of blood in suction) was less in subtotal hysterectomy.

INCIDENCE OF COMPLICATIONS

Complication	No. of cases (n =32)	Incidence (%)
Post op fever	20	62.5
Bladder injury	3	9.3
Vesicovaginal fistula	1	3
Acute kidney injury	4	12.5
Re-laparotomy	1	3
Mortality	4	12.5

CONCLUSION

This study shows that incidence of obstetric hysterectomy is high in rural, unbooked emergency patients who are not taking proper antenatal care due to poverty, ignorance and illiteracy. Even though all patients had undergone obstetric hysterectomy, in life threatening conditions, with proper surgical techniques, better anesthesia, availability of blood and blood products, broad spectrum antibiotics, mortality is still there because some patients were referred in stage of irreversible shock and DIC.

Obstetric hysterectomy has an important role particularly in cases of atonic PPH when done in time. Uterus conserving measures like hemostatic sutures, uterine tamponade, systemic pelvic devascularisation may be tried in young hemodynamically stable patients. But hysterectomy should be performed before the downward spiral of hypotension, shock, DIC,AKI starts.

The operation should be kept as reserve tool and used only in life threatening conditions. If performed for proper indications with due knowledge of operative techniques and proper facilities can prove life saving for many patients.

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