# Recent Scenario in Obstetric Hysterectomy An analytical montage of 73 cases over a period of 5 years in rural teaching hospital

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Summary: An analytical review of 73 cases of obstetric hysterectomy performed at B.S. Medical College Hospital over a period of 5 years from January 1991 to December 1995 is presented here. Incidence of obstetric hysterectomy was 0.14% out of 49909 deliveries. Only 20.5% of these study cases were booked. Rupture of uterus was the most important indication (64.4%) Total hysterectomy, however, had been possible in 32.8%. High risk antenatal factors were found in 45.2%; majority of which were post-caesarean pregnancy 24.6%. Bladder Injury had occured in 8.2%. Maternal death occured in 16.4%, majority of them died of hypovolemic shock; one interesting case of bicornuate uterus with rupture of one horn was found during this study period.

#### Introduction

It was more than two centuries ago when obstetricians had found a novel answer to the challenge of life threatening obstetric haemorrhage and infection which was a resort to surgery. However this scenario has changed rapidly during recent years due to advent of broad spectrum antibiotics, blood transfusion, prostaglandins and modern antenatal protocol. The purpose of our study in a rural set up was to probe into modern trends of obstetric hysterectomy.

#### Material and Methods

Seventy three cases of obstetric hysterectomy operated upon at B.S. Medical College Hospital from 1991 to 1995 were reviewed statistically. All these hysterectomies were done as emergency procedures. They were performed at the time of caesarean sections, or post-vaginal delivery or at emergency laparotomy.

They were analysed in terms of age, parity, registration, status, presence of any high risk antenatal factor, type of delivery, indication of hysterectomy, complications during surgery, units of blood transfusion, maternal outcome,

operative details, post-operative complications and follow up.

#### Incidence

The total number of deliveries being 49909, the incidence **Table I** 

Type of delivery

Delivery by abdominal route		No. of case	
(Laparotomy for rupture uter	us) 38	52%	
L.U.C.S.	15	20.5%	
Instrumental	7	9.5%	
Forceps	2		
Craniotomy	4		
evisceration	1		
Internal podalic	2	2.7%	
Version			
Assisted breech	1	1.37%	
Normal vaginal delivery	6	8.2%	
Total	69	94.2%	

4(5.4%) cases of M.T.P. were excluded.

The incidence of Obstetric hysterectomy was 0.146%.

Incidence reported by Allahabadia et al (1991) from Sion Hospital, Bombay was 0.19% and by Sturdee et al (1986) study from Birmingham Maternity Hospital was 0.07%. Incidence observed by Agashe et al (1995) from N. Wadia Maternity Hospital Bombay was as low as 0.056% because of non-acceptance of unregistered patients in that Hospital.

eracy and craze for having a male child prevailing in the local region. It was interesting to note that incidence of grand multipara was only 12.5% (9 cases).

# Registration

Only 15 cases were found to be booked (20.5%), rest of the patients were unbooked which were referred from

Table IIA

Indications of obstetric hysterectomy in present series and other studies.

Indication	Present Series% n=73	Agashe et al% (1995)	Allahabadia et al% (1991)	Ambiye et al% (1988)	Kaul's series (1982)	Giwa-osagie et al % (1983)
Rupture uterus	64.4	13.3	20	67.8	63.9	60.7
Spontaneous	52.1					
Traumatic	12.3					
2. Post Partum Haemorrhage	16.4	60	16	8.4	9	
Atonic	13.7	50				
Traumatic	2.7	10				
3. Placental cause	12.3	26.5	6	-	3.6	
(Morbid adhesion of placenta)						
4. Chorio amnionitis		-	4	0.9	1.8	
5. Prolonged labour	-	-	9	-	-	
6. Perforation following MTP	5.5	-	_	10.3	7.2	
7. Septic Abortion	_	_	46	8.4		
8. Gestational Tumour	-	-	-	0.9	10.9	
9. Secondary Abdominal pregnancie	es 1.4	-	-	0.9	-	
10.Cancer cervix	-	-	-	1.8	-	
11.Sterilization	-	-	4.	-	3.6	

#### Age & Parity

The age group of 21-25 yrs. and 26-30 yrs. shared equal number of cases (26 cases). Most of the mothers were second para (21 cases). The youngest patient was 18 years old and the oldest patient was 40. This was observed because of social custom of early marriage, illit-

Primary Health Centres and Private Nursing Homes.

#### **High Risk Antenatal Factor**

24.6% (18) cases were post Caesarean pregnancy, 5.4%(4) cases had placenta praevia, 4.1%(3) cases had history of retained placenta in the previous pregnancy,

5.4%(4) cases had Rh negative blood group and 2.7%(2) cases had history of perforation of uterus repaired.

**Type of Delivery** 

Table I: On 38 cases (52%) hysterectomy was performed for rupture uterus, at the time of laparotomy. In 20.5% cases hysterectomy followed a Caesarean delivery. Out of these in 2.7% cases LSCS was done for obstructed labour which resulted in Caesarean hysterectomy due to intractable broad ligament haematoma. In 12.3% cases Caesarean hysterectomy was done for morbid adhesion of the placenta; out of these in 5.4% cases, the placenta was adherent to the previous scar of the lower segment in repeat caesarean pregnancy. Atonic post-partum haemorrhage was the indication for Caesarean hysterectomy in 5.4% cases.

Table IIB
Indication for Caesarean hysterectomy

Indication	%	No. of cases		
Broad ligament haema	toma			
in obstructed labour				
during LSCS	2.72%	2 (Two)		
Morbid adhesion of				
Placenta	12.2%	9 (nine)		
Acreta	4.1%			
Percreta	2.7%			
Praevia with acr	reta 5.4%			
Atonic post partum				
haemorrhage-	5.44%	4 (four)		
Total	20.5%	15 (Fifteen)		
	(approx)			

9.5%(7) cases were of instrumental deliveries; Internal podalic version was done in 2.7%(2) cases. One case of assisted breech delivery and 8.2%(6) cases had normal vaginal delivery, 5.4%(4) cases underwent hysterectomy after M.T.P. However in Agashe et al (1995) study Cae-

sarean section was the commonest mode of delivery (66%).

#### Indication

Table II: There were 64.4% (47) cases of rupture of uterus; 16.4%(12) cases of atonic PPH, 12.3%(9) cases of placental cause, 5.5%(4) cases of perforation of uterus following M.T.P. In the rupture group there was one case of rupture of one horn of bicornuate uterus. Hysterectomy was resorted in one secondary abdominal pregnancy as placenta was adherent to the posterior surface of the fundus which was having a rent.

### **Operative Details**

In this study 32.8% (24) cases were total hysterectomies and the rest were subtotal. In one case internal iliac artery ligation was attempted to control the P.P.H., failing which hysterectomy was resorted to. Bladder injury was seen in 8.2%(6) cases. Out of these, three cases had rupture uterus and the uterine tear extended into the urinary bladder; in remaining three cases bladder was known to have been injured during operation due to extensive scarring of lower uterine segment and low-lying placenta. Barkley (1970) reported the frequency of damage to the urinary tract, particularly the bladder during Caesarean hysterectomy. Plauche et al (1981) also observed the injury to urinary tract during caesarean hysterectomy. The bladder rent was closed carefuly and the bladder was drained with suprapubic cystostomy post operatively. All the cases were given postoperatively antibiotic cover, and blood transfusion; on an average 2 units of blood was transfused to the patients.

# Post Operative complications & follow up

Commonest postoperative complication was wound dehiscence. Paralytic ileus, deep vein thrombosis, fever, urinary retention were not too uncommon. During follow up 4 patients turned up with a vesico-vaginal fistula.

## Maternal outcome

Table III

Maternal deaths in different studies

Stu	ıdy	No.	%	
1 Dro	sent study	12	16.4	
	ashe et al (1995)	6	20	
	ahabadia et al (1991)	16	32	
4. Stu	rdee & Rushton (1980)	Nil	Nil	
5. Pla	uche W.C. (1986)			

There were total 12 maternal deaths (16.4%) commonest cause of death was hypovolemic shock (8 cases) (66.7%); 2 were due to immediate post operative cardiac arrest and 2 were due to renal failure. All of them underwent subtotal hysterectomy. The highest mortality occured in unbooked cases (10 cases). Giwa-osagie et al (1983) reported the lowest mortality in booked patients who underwent subtotal hysterectomy and highest mortality (50%) in total hysterectomy of unbooked patients.

In Agashe et al (1995) study there were 6 deaths out of 30 cases (20%) of which 3 were due to DIC.

In Allahabadia et al (1991) series there were total 16 deaths out of 50 cases (32%); commonest cause of death was DIC.

Sturdee et al (1980) study at Birmingham Hospital showed not a single death in 15 years and that was an amazing achievement while the Louisiana State University series (Plauche 1986) recorded 6 maternal deaths in 912 caesarean hysterectomies (0.66%).

## Conclusion

The procedure of obstetric hysterectomy must be con-

sidered a more difficult one than that of repeat Caesarean section. The surgeon must be skillful; anaesthesia must be of high order. It is still a life saving operation and thus it should be regarded as an essential part of speciality training.

Early transportation of patient to the referral centre, advocation of caesarean section in time by avoiding difficult vaginal delivery will minimise the incidence of hysterectomy as well as maternal morbidity and mortality.

Setting up of first referral unit (FRU) in rural areas will be immensely helpful in this regard.

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#### Acknowledgement

We are indebted to the Superintendent, B.S. Medical College Hospital, Bankura for allowing us to utilise hospital records.