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A Retrospective Study of Obstetric Hysterectomy Cases in a Tertiary Care Centre

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Abstract: ***Background: Post partum hemorrhage (PPH) is a life threatening condition. The objective of this study is to analyse the cases of obstetric hysterectomy to know the incidence indication, demographic characteristics and feto-maternal outcome associated with the surgery Methods: Retrospective analytical study of cases of obstetric hysterectomy cases performed in obstetrics & gynaecology department in G. M. E. R. S medical college & hospital, Junagadh over a period of five years. The data of incidence, indication, demography and fetomaternal complications wll be collected and analysed from medical records. Results: Of 13 obstetric hysterectomy cases were operated, overall incidence was 0.032%, 0.023% (7 out of 30, 564) was in cases of vaginal delivery and 0.066% (6 out of 9064) was in cases of LSCS for various indications. Age of patients ranges from 20-40 (mean age≈ 27). Six patient 46% were in the age group of 26 to 30years and were multipara (parity > 4). The commonest indication for performing obstetric hysterectomy was postpartum haemorrhage 5 (38.4%) followed by placenta previa 4 (30.7%), morbidly adherent placenta2 (15.4%) and rupture uterus 1 (7.7%). Fever was the commonest complication 7 (53.4%). There were two maternal deaths. Conclusion: Obstetric hysterectomy is a life saving procedure. The outcome of the procedure depends on timely decision, good clinical judgement and proper surgical technique.***

Keywords: Obstetric hysterectomy, post partum haemorrhage, rupture uterus, previous caesarean section, maternal mortality

1. Introduction

Obstetric hysterectomy was originally devised more than 200 years ago as a surgical attempt to manage life threatening obstetric hemorrhage. Obstetric hysterectomy is the surgical removal of uterus at the time caesarean section, following caesarean section, immediately after vaginal delivery or in the period of puerperium.1

Obstetric hysterectomy is usually the last resort in the obstetric armametrium to save the life of mother.2 In developing countries obstetric haemorrhage is the leading cause of maternal deaths.3 Timely decision making good surgical skills with speedy intervention are the key component of this life saving procedure. Early resuscitation, blood transfusion and its components helps to improve deteriorating hemodynamic parameters and helps the patient to withstand surgical procedure and anesthesia.

The commonest indication for obstetric hysterectomy cited in literature are uterine rupture and atonic uterus.4With increasing number of caesarean deliveries abnormal placental adhesions, placenta praevia has emerged as the most common indication for their surgical procedure in developed countries.5The change in trend is being seen in developing countries as well.2, 6

The purpose of our study is to analyse the cases of obstetric hysterectomy to evaluate the incidence, indication and feto-maternal complications associated with the surgery.

2. Methods

Retrospective analytical study of cases of obstetric hysterectomy cases performed in obstetrics & gynaecology department in G. M. E. R. S medical college & hospital, Junagadh over a period of six years. The data of incidence, indication, demographyand fetomaternal complications collected and analysed from medical records.

Inclusion criteria: All women who delivered after 24 week of gestation and all women who delivered outside for obstetric complication were included in study

Exclusion criteria: Women who delivered before 24 weeks of gestation, undergoing hysterectomy for indication other than obstetric indication were excluded from study

Table 1

Age (yrs)	N (%)
20-24	4 (30.77%)
25-29	6 (46.15%)
30-34	2 (15.38%)
35-40	1 (7.69%)

Table 2

PARITY (P)	N (%)
1	2 (15.38%)
2	2 (15.38%)
3	4 (30.77%)
≥4	5 (38.46%)

Table 3

Indication	N (%)
Morbidly adherent placenta	2 (15.4%)
Atonic postpartum haemorrhage	5 (38.4%)
Uterine rupture	1 (7.7%)
Abruptio placentae	1 (7.7%)
Placenta praevia	4 (30.7%)
Broad ligament haemotoma	0 (0%)

Table 4: Feto-maternal complications after Obstetric Hystrectomy

Maternal	N (%)
Fever	7 (53.4%)
Coagulopathy	6 (46.15%)
Wound sepsis	3 (23.03%)
Need for vasopressors	3 (23.03%)
ICU admission	13 (100%)
Mortality	1 (7.7%)
Relaprotomy	1 (7.7%)

Fetal N (%)	
NICU admission	8 (61.54%)
Mortality	2 (15.38%)

3. Results

During the study period of six years total number of deliveries were 40, 168, of which vaginal deliveries were 30, 564 **a**nd LSCS were 9064. Of which 13 obstetric hysterectomy were operated so overall incidence was 0.032%, 0.023% (7 out of 30, 564) was in cases of vaginal delivery and 0.066% (6 out of 9064) was in cases of LSCS for various indications.

Maternal Characteristics – Age of patients ranges from 20-40 (mean age≈ 27). Six patient 46% were in the age group of 26 to 30years and were multipara (parity > 4). This shows that the incidence of this radical and lifesaving surgery is more in this group. Antenatal Booking-5 patients (39%) were unbooked and eleven patients (84.6%) were from rural area.

The commonest indication for performing obstetric hysterectomy was postpartum haemorrhage 5 (38.4%) followed by placenta previa 4 (30.7%), morbidly adherent placenta2 (15.4%) and rupture uterus 1 (7.7%). Previous caesarean section was a significant high risk factor 4 (30%), all placenta previa was associated with previous caesarean section100%.

Type of hysterectomy and associated surgical procedure – Out of the 13 hysterectomies performed, 12were total hysterectomy and 1 were subtotal.3 patients underwent internal iliac artery ligation prior to hysterectomy. Postoperative complication – Postoperative shock, paralytic ileus and fever were the common complications. The average blood loss was in the range of 2 to3 litres. Hospital Stay – 8 (61.5%) had hospital stay of around 25 days. There was 1 maternal deaths (7.7%) in patients with associated medical complication.

Foetal characteristics: There were 11 live births with average birth weight of 2.6 kgs. Two out of the total were preterm and died in neonatal period, another two were intrauterine deaths. The proportion of perinatal mortality was 15.4%

4. Discussion

Obstetric hysterectomy is a lifesaving procedure. Prompt decision and good surgical skills are the two factors of surgeon's that affect the maternal outcome. 7 The present study was done to evaluate the incidence, indication, maternal risk factors and complications associated with the surgery.

In our study the incidence of Obstetric hysterectomy was 0.032% which was in less range as reported by Kanhere A et al and Joshi KP et al [3, 16] The primary reason for this incidence is due to the fact that our institution is a tertiary referral center and timely referral from periphery.

Six patient 46% were in the age group of 26 to 30years and were multipara (parity > 4) which were highly associated with multiparty as seen in Najam R et al.2 This observation highlights the need of emphasis on usage of contraceptive methods and counselling.

The commonest indication of obstetric hysterectomy in our study was was postpartum haemorrhage 8 (38.4%) followed by placenta previa 5 (30.7%). Similar findings have being reported by Kant et al (41.46%) and Agashe and Marathe (60%).8

The dangerous combination of previous caesarean section, morbid adherent placenta and placenta previa was seen in our cases. This was highlighted in other studies also.6, [9, 10] It is reported in the literature[11], the incidence of obstetrical hysterectomy due to uterine atony shows a decline from 42% to 29% while the incidence has increased from 25%to 41% due to abnormal placentation. This is due to increased incidence of abnormal placental insertion, invasion anomalies associated with increased rate of caesarean section. Use of uterotonics and hemostatic agents along with use of other surgical technique like internal iliac artery ligation does not avert the need of obstetric hysterectomy in these cases.

Preoperative hemoglobin and hematocrit levels were in a low range of 5.0-8.0 gm/dl. This resulted in fresh blood transfusion and blood components.2

Postoperative shock, paralytic ileus and fever were the common complications.1[2]

The maternal mortality rate in our study was 7.7% with DIC and septicaemia being the attributing causes. Kanwar et al[13] reported this as 12% and Siddiq et al of 9.7%.1[4]Praneswari Devi et al reported no mortality in their studies.1[5]Perinatal mortality was 15.4%.

5. Conclusions

Obstetric hysterectomy is a lifesaving procedure. The outcome of the procedure depends on timely decision, good clinical judgement and proper surgical technique. It reduces the maternal morbidity and mortality. Proper antenatal care, identification of high risk cases, patient & relative counselling, and strengthening of referral system can prevent the incidence of this catastrophic surgery. Every obstetrician should harbour the skill to perform Obstetric hysterectomy and its judicious use can help in reducing the maternal morbidity and mortality.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

References

[1] McNulty JV. Elective caesarean hysterectomy-revisited. Am J ObstetGynaecol 1984; 149: 29-32.
[2] Najam R, Bansal P, Sharma R, Agrawal D. Emergency Obstetric Hysterectomy: A retrospective study at a

tertiary care hospital. Journal of Clinical and Diagnostic Research 2010; 4: 2864-2868. .
[3] Kanhere A et al. Int J Reprod Contracept Obstet Gynecol.2013 Dec; 2 (4): 562-565
[4] Chestnut DH, Eden RD, Gall SA, Parker RT. Peripartum hysterectomy: A review of cesarean and postpartum hysterectomy. ObstetGynecol 1985; 65: 365-70.
[5] Zelop CM, Harlow BL, Frigoletto FD, Safon LE, Saltzman Dh. Emergency peripartum hysterectomy. Am J ObstetGynecol 1993; 168: 1443-1445.
[6] Korejo R, Bhutta S, Nasir A, Yasmin H. Emergency Obstetric Hysterectomy. JPMA 62: Dec 2012; 1322-1325.7. Clark SL, Yeh SY, Ph
[7] Clark SL, Yeh SY, Phelan JP, Bruce S, Paul RH. Emergency hysterectomy for obstetrical hemorrhage. ObstetGynecol 1984; 64: 376-80.
[8] Agashe A P, Marathe SS. Obstetric hysterectomy (A review of 50 cases from January 1987 to August 1990). J ObstetGynecol India 1991; 45: 490-3.
[9] Bakshi S, Meyer BA. Indications for and outcomes of emergency peripartum hysterectomy. A 5-year review. J Reprod Med 2000; 45: 733-7.
[10] Francois K, Ortiz J, Harris C, Foley MR, Elliott JP. Is peripartum hysterectomy more common in multiple gestations? ObstetGynaecol 2005; 105: 1369-72.
[11] Zorlu CG, Turan C, Isik AZ, Danisman N, Mungan T, Gokmen O. Emergency hysterectomy in modern obstetric practice. Changing clinical perspective in time. ActaObstetGynaecolScand 1998; 77: 186-90.
[12] Vázquez JA, Rivera GV, Higareda SH, Páez FG, Vega CC, Segura AP. Obstetric hysterectomy. Incidence, indications and complications. GinecolObstet Mex.2008; 76 (3): 156-60.
[13] Kanwar M, Sood PL, Gupta KB, et al. Emergency hysterectomy in obstetrics. J ObstetGynecol India 2003; 53: 350-2.
[14] Siddiq N, Ghazi A, Jabbar S, Ali T. Emergency Obstetrical Hysterectomy (EOH): A Life saving procedure in obstetrics. Pakistan J surgery 2007; 23 (3): 217-9.
[15] Devi P, Singh RK, Singh D. Emergency Obstetric hysterectomy. J ObstetGynecol India 2004; 54: 343-5.
[16] Joshi KP et al. Int J ReprodContraceptObstet Gynecol.2020 Jul; 9 (7): 2813-2816