Original Article

Obstetrical Hysterectomy - Is a Life Saving Option

Hysterectomy - Is a Life Saving Option

Aneela Gul Shaikh, Abdul Malik Sangri, Kulsoom Azad Lashari, Fozia Unar, Bushra Noor and Sajida Parveen

ABSTRACT

Objective: To evaluate the frequency, indications, maternal morbidity and mortality associated with obstetrical hysterectomy.

Study Design: Descriptive / cross sectional study.

Place and Duration of Study: This study was conducted at the Department of obstetrics and Gynecology KMC, Khairpur Mir's from August 2014- July 2017.

Materials and Methods: All patients operated for obstetrical hysterectomy during study period included in study. This was a retrospective study. Data was collected from yearly maintained registers on proforma. The parameters analyzed were age, parity, indications, morbidity & mortality by SPSS V-21.

Results: Total deliveries during study period were 17101. Total number of obstetrical hysterectomy during study period was 75 cases. This giving an incidence of 0.43% that is 1 in 228 deliveries. Mainly 38 (50.6%) patients were belongs to age group 30 - 40 years. 64 (85%) women were multi parous and only 11 (15%) were primigravida. Most common indication of obstetrical hysterectomy was morbid adherent of placenta (33.3%) than ruptured uterus (30.6%), abruptio placentae (18.6%), uterine atony (16%) and secondary PPH (1.3%).

Regarding intra operative complication 2 (2.6%) got bladder injury. 1(1.3%) patients needed repeat laprotomy due to bleeding. 32(42.6%) patients developed post operative pyrexia, 12(16%) developed wound infection, 10 (13.3%) patients developed post operative paralytic ileus. 24 (32%) patients required ICU admission. 3 (4%) patients died due to excessive haemorrhage. 1 (1.3%) developed vesicovaginal fistula.

Conclusion: The study conclude that multiparity is the risk factor for obstetrical hysterectomy. Morbid of adderentof placenta is the commonest indication due to rising trends of caesarean section. It is necessary obstetrician should avoid unnecessary cesarean section in primigravida.

Key Words: Obstetrical Hysterectomy, Life Saving Option

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INTRODUCTION

Obstetrical hysterectomy is defined as removal of uterus either at the time of cesarean section or following vaginal delivery or within the puerterium period¹. It is one of the most risky and dramatic operation in modern obstetric². Emergency obstetrical hysterectomy is usually undertaken for life threatening obstetrical hemorrhage and is therefore considered as a "near miss" event ³. The first operation was performed in North America by Horatio storer, then by Lawson tail in UK⁴.

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Received: July, 2019 Accepted: November, 2019 Printed: March, 2020 The incidence of obstetrical hysterectomy is around 0.6 to 2.28 per 1000 birth in the USA. In developing countries the incidence is more i.e0.4 to 0.7 %⁵. The sincidence is varies from center to center depending on available facilities at peripheral center as antenatal care, intranatal monitoring, obstetrical expertise, blood transfusion facility and efficient transport ⁶.

Obstetrical hysterectomy has a definitive role in developing countries where the advance modalities like uterine artery embolization to prevent PPH is not available⁷. On one hand it is the last resort to save a mother's life, and on the other hand the mother's reproductive capability is sacrificed. Many times it is very difficult decision & require good clinical judgment. Proper timing & meticulous care may reduce or prevent maternal complication ².

In the past the most common indication of Emergency obstetrical hysterectomy was uterine atony& uterine rupture but recently morbid adherent of placenta & placenta previais a major indication⁸.

Maternal mortality with placenta percreta due to haemorrhage can be as high as 10 %. Elective pre operative planning by obstetrician & anesthetist in case of morbid adherent of placenta can reduce the maternal morbidity and mortality rate by minimizing the need for

transfusion of blood products⁹. Haemorrhage remains a significant cause of maternal mortality in the UK and worldwide¹⁰. The maternal outcome greatly depends on timely decision, the surgical skills and the speed of performing obstetrical hysterectomy¹¹.

Because of the high caesarean section rate globally result in rise of placenta previa& morbid adherent placenta leads to increasing incidence of obstetrical hysterectomy. Against this back ground we aimed to evaluate the frequency, indications, maternal morbidity and mortality associated with obstetrical hysterectomy

MATERIALS AND METHODS

All patients operated for obstetrical hysterectomy during study period of three years from August 2014 to July 2017 included in the study. This was a retrospective study. Data was collected from yearly maintained registers on proforma. The parameters analyzed were frequency, age, parity, indications, morbidity & mortality by SPSS V-21.

RESULTS

Total deliveries during study period were 17101. Total number of obstetrical hysterectomy during study period was 75 cases. This giving an incidence of 0.43% that is 1 in 228 deliveries. Mainly 38 (50.6%) patients were belongs to age group 30 - 40 years. 64 (85%) women were multi parous and only 11 (15%) were primigravida. Most common indication of obstetrical hysterectomy was morbid adherent of placenta(33.3%) than ruptured uterus (30.6%), abruptio placentae (18.6%), uterine atony (16%) and secondary PPH (1.3%).

Table No.1: Age Distribution

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Age Distribution	No.	%			
<20	2	2.6 %			
20-30	31	41.3 %			
30-40	38	50.6 %			
>40	04	5.3 %			
Gravidity					
Primigravida	11	14.6%			
Multipara	64	85%			

Table No.2: Indications of abdominal hysterectomy

Tuble 1 (0.21 Indications of abdominal hysterectoring				
	No:	Percentage		
Placenta previa	25	33.3%		
Ruptured uterus	23	30.6%		
Abruptio placentae	14	18.6%		
Uterine atony	12	16%		
Secondary PPH	1	1.3%		

Regarding intra operative complication 2 (2.6%) got bladder injury. 1(1.3%) patients needed repeat laprotomy due to bleeding. 32(42.6%) patients developed post operative pyrexia, 12(16%) developed wound infection, 10 (13.3%) patients developed post

operative paralytic ileus. 24 (32%) patients required ICU admission. 3 (4%) patients died due to excessive haemorrhage. 1 (1.3%) developed vesicovaginal fistula.

Table No.3: Complications of abdominal hysterectomy

1	Intra Operative	No:	Percentage
	Complications		
	Bladder injuries	02	2.6%
2	Post-Operative	No	Percentage
	Complications		
	Pyrexia	32	42.6%
	Wound infection	12	16%
	Paralytic ileus	10	13.3%
	Repeat laprotomy due	01	1.3%
	to bleeding		
	ICU admission	24	32%
	Mortality	03	4%
3	Delayed Complication	No	Percentage
	Urinary fistula	1	1.3%

DISCUSSION

During the study period of three years, total numbers of deliveries were 17101. Total Obstetrical hysterectomies were 75 giving an incidence of 0.4% & 1 in 228 deliveries. It is lower than the incidence that reported in Columbia 0.8 %, Nigeria 0.5% but it is higher than China 0.2% & little bit higher than pervious study conducted in Pakistan 0.27 % 12. Incidence of obstetrical hysterectomy almost similar in a study conducted at Multan 1 in 287 patients /0.381% 13. Study conducted at UK showing the incidence is approximately 1/2500 birth 10. The incidence is lower in developed countries due to good antenatal care, good nutritional status, high literacy rate & social factors.

In our study (85%) were multi parous. This is similar to study conducted at India ¹⁴.

In our study most common indication of obstetrical hysterectomy was morbid adherent of placenta (33.3%), followed by rupture uterus (30.6%), abruptio placentae, uterine atony and secondary PPH. It is reported in the literature that the incidence of obstetrical hysterectomy due to uterine atony had decline from 42% to 29.2% and incidence to abnormal placentation increased from 25.6% to 41.7% ¹⁵. Our hospital is an important referral center in this area so most of the patients with previous cesarean section and low lying placenta referred from surrounding areas. Since last decades reports showed that Berminghan 50%, Kuwait 64%, in Italy 55% cases of obstetrical hysterectomy were due to placental problems⁴.

The most common complication was post operative pyrexia 32(42.6%). This is similar to study conducted at Ahmedabad ¹⁶. This is because most of the patients were un booked, received multiple blood transfusion.

Intra operative complication 2 (2.6%) developed bladder injury during procedure. This is similar to a study conducted at Multan showed urinary tract injury in 3 patients $(14.2\%)^{13}$.

1 (1.3%) patients needed repeat laprotomy due to bleeding. 24(32%) patients required ICU admission.

12 (16%) developed wound infection 10(13.3%) developed post operative paralytic ileus.

In our study 3(4%) patients expired during procedure or in immediate post operative period. A Study conducted at Ayoub Teaching Hospital Abbtobad showed maternal mortality was 10.5% ⁸. Another study conducted at Kalkatta showing maternal mortality in obstetrical hysterectomy is 11.1% ¹⁷. Another study conducted at India showing mortality is 9.7% ². The morbid state of patient at the time of obstetrical hysterectomy is likely responsible for the high maternal mortality rate than the operative procedure itself. Timing is important for good outcome.

CONCLUSION

The study conclude that multiparity is the risk factor for obstetrical hysterectomy. Morbid of adderentof placenta is the commonest indication due to rising trends of caesarean section. It is necessary obstetrician should avoid unnecessary cesarean section in primigravida. It is also necessary that the policy makers should take action against un skilled birth attendants to reduce the incidence of obstetrical hysterectomy due to ruptured uterus.

Author's Contribution:

Concept & Design of Aneela Gul Shaikh

Study:

Drafting: Abdul Malik Sangri,

Kulsoom Azad Lashari

Data Analysis: Fozia Unar, Bushra Noor, Sajida Parveen

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Final Approval of version: Aneela Gul Shaikh

Conflict of Interest: The study has no conflict of interest to declare by any author.

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