OUTCOME OF PERIPARTUM HYSTERECTOMY AND ITS COMPLICATIONS

**Abstract:** OBJECTIVE: Purpose of conducting this study was to determine frequency and indications of peripartum hysterectomy among the patients presenting to tertiary care hospital.

**Study Design:** it is a Prospective study.

**Duration of study:** Study was started in January 2018 and after the duration of seven months it was completed in July 2018.

**Setting:** This study was conducted in Gynecology and Obstetrics ward of Jinnah Hospital Lahore, Pakistan. This is a tertiary care hospital located in the center of city.

**Patients and Methods:** Total 37 cases were studied. Patients presenting with different indications of hysterectomy were evaluated. A criterion was formed for inclusion and exclusion of patients. According to this criterion only those cases were included which were having definite indication of hysterectomy and they were in peripartum period. These cases were reported either in emergency department or out-patient doors. Depending on the disease and condition of the patient some of the cases were operated in emergency basis and mostly cases were operated in main operation theater on elective basis. A proforma was designed for documenting all related data of the patient such as age, presenting complaints, gestational age or peripartum period, maternal and fetal outcome of peripartum hysterectomy. Patients were informed about the study and their consent was taken for including their data in the study. Consent was also taken from the in charge of ward for conducting study. Results were calculated in the form of frequencies and data was analyzed using Microsoft office and SPSS version 2007. Data was expressed in the form of tables and graphs.

**Results:** This study was conducted on 40 cases which were in peripartum period and underwent hysterectomy due to ruptured uterus in 12 (32.4%) cases, atony of uterus in 7 (18.9%) cases, abnormal position of placenta in 14 (37.8%) cases and couvelairs uterus in 4 (10.8%) patients. Two mothers died after hysterectomy so maternal mortality was 5.4%. Maternal morbidity after hysterectomy was seen in these cases such as anemia was found in 20 (50%) cases, acute renal failure in 2 (5%) cases, bladder injury in 3 (7.5%) cases, sepsis occurred in 5 (13.5%) cases, paralytic ileus reported in one case, wound disruption seen in 8 (20%) cases and urinary tract infection was found in 4 (10%) cases.

**Conclusion:** Hysterectomy is widely performed surgical procedure which result in few serious complications. Anemia, UTI and wound infections are its complications. Maternal mortality rate is low as a result of hysterectomy because purpose of this procedure is mainly to save life of the mother.

**Key words:** peripartum hysterectomy, maternal outcome, fetal outcome.

**Language:** English
INTRODUCTION
Peripartum period includes time of birth and just after birth. In this period few complications or abnormal conditions indicate hysterectomy for saving life of mother. Uncontrolled bleeding from the uterus after child birth is an indication of hysterectomy to prevent hypovolemic shock. Rupture of uterus during contraction of uterine muscles or during cesarean section by the surgeon happens most of the time so in this situation hysterectomy is done if uterus is unable to repair primarily. Abnormal position of placenta is much common among mothers who make delivery complicated and often indicating hysterectomy. In this condition spontaneous vaginal delivery is very risky so Cesarean is done. During cesarean iatrogenic injury to intestines, bladder and uterus is much common. Severe anemia and hypovolemic shock are drastic complications leading to death of mother or fetus. A criterion was formed for inclusion and exclusion of patients. This study was conducted on 40 cases which were in peripartum period and underwent hysterectomy due to ruptured uterus in 12(32.4%) cases, atony of uterus in 7(18.9%) cases, abnormal position of placenta in 14(37.8%) cases and couvelairs uterus in 4(10.8%) patients. Two mothers died after hysterectomy so maternal mortality was 5.4%. Maternal morbidity after hysterectomy was seen in these cases such as anemia was found in 20(50%) cases, acute renal failure in 2(5%) cases, bladder injury in 3(7.5%) cases, sepsis occurred in 5(13.5%) cases, paralytic ileus reported in one case, wound disruption seen in 8(20%) cases and urinary tract infection was found in 4(10%) cases. According to this criterion only those cases were included which were having definite indication of hysterectomy and they were in peripartum period. These cases were reported either in emergency department or out-patient doors. Depending on the disease and condition of the patient some of the cases were operated in emergency basis and mostly cases were operated in main operation theater on elective basis. A proforma was designed for documenting all related data of the patient such as age, presenting complaints, gestational age or peripartum period, maternal and fetal outcome of peripartum hysterectomy Consent was also taken from the in charge of ward for conducting study. Results were calculated in the form of frequencies and data was analyzed using Microsoft office and SPSS version 2007. Data was expressed in the form of tables and graphs. Patients undergoing peripartum hysterectomy have longer hospital stay than those underwent simple hysterectomy. Proper record of such cases and evaluation of causes and risk factors can help in forming policies. Ages of females in this study was ranging from 18-35 years with mean age of 28 years. Maximum females were above 25 years.

Patients and Methods
This is a prospective study conducted in a teaching hospital. This study was completed in duration of 7 months. Total 37 cases were studied. Patients presenting with Different indications of hysterectomy were evaluated. A criterion was formed for inclusion and exclusion of patients. According to this criterion only those cases were included which were having definite indication of hysterectomy and they were in peripartum period. These cases were reported either in emergency department or out-patient doors. Depending on the disease and condition of the patient some of the cases were operated in emergency basis and mostly cases were operated in main operation theater on elective basis. Abnormal
position of placenta is much common among mothers who make delivery complicated and often indicating hysterectomy. In this condition spontaneous vaginal delivery is very risky so cesarean is done. During cesarean iatrogenic injury to intestines, bladder and uterus is much common. Severe anemia and hypovolemic shock are drastic complications leading to death of mother or fetus. Neonatal morbidity reported was sepsis in 6(16.2%) neonates, Jaundice was found in 8(21.6%), birth asphyxia was found in 2(5.4%) cases. There were no complications found in 21(56.7) neonates.

![Figure-1. Indications of peripartum hysterectomy among females of study group.](image)

### Table-1. Maternal outcome after peripartum hysterectomy.

| Maternal outcome                                  | Number of cases | (%) |
|---------------------------------------------------|-----------------|-----|
| Anemia                                            | 20              | 50  |
| Urinary bladder injury                            | 3               | 7.5 |
| Wound infection and disruption                     | 8               | 20  |
| UTI                                               | 4               | 10  |
| Acute renal failure                               | 2               | 5   |
| Paralytic ileus                                   | 3               | 7.5 |

| Neonatal outcome                                  | Number of cases | (%) |
|---------------------------------------------------|-----------------|-----|
| Neonatal sepsis                                   | 6               | 15  |
| Birth asphyxia                                    | 5               | 12.5|
| Jaundice                                          | 8               | 20  |
| Normal neonates                                   | 21              | 52.5|
DISCUSSION

There are many risk factors and complications associated with peripartum period and some of them are abnormal placenta position which may be accreta, increta and percreta. Placenta previa is location of placenta in abnormal area which may be low lying and occluding inner cervical opening so making spontaneous delivery difficult. In such cases cesarean is done to minimize complications. Some of the time mothers experience prevaginal massive bleeding during intra partum or post partum period. In this situation hysterectomy is done for hemostasis and to save life of the patient. Peripartum period includes time of birth and just after birth. In this period few complications or abnormal conditions indicate hysterectomy for saving life of mother. Uncontrolled bleeding from the uterus after child birth is an indication of hysterectomy to prevent hypovolemic shock. Rupture of uterus during contraction of uterine muscles or during cesarean section by the surgeon happens most of the time so in this situation hysterectomy is done if uterus is unable to repair primarily. Abnormal position of placenta is much common among mothers who make delivery complicated and often indicating hysterectomy. In this condition spontaneous vaginal delivery is very risky so cesarean is done. During cesarean iatrogenic injury to intestines, bladder and uterus is much common. Proper record of such cases and evaluation of causes and risk factors can help in forming policies. According to a study done by clark et al 53% cases underwent hysterectomy. Another study done by Tahir et al morbidity was reported in 58% cases. Morbidity reported in America was 49.7% according to study done by Barclay. This study was conducted on 40 cases which were in peripartum period and underwent hysterectomy due to ruptured uterus in 12(32.4%) cases, atony of uterus in 7(18.9%) cases, abnormal position of placenta in 14(37.8%) cases and couvelairs uterus in 4(10.8%) patients. Two mothers died after hysterectomy so maternal mortality was 5.4%. Maternal morbidity after hysterectomy was seen in these cases such as anemia was found in 20(50%) cases, acute renal failure in 2(5%) cases, bladder injury in 3(7.5%) cases, sepsis occurred in 5(13.5%) cases, paralytic ileus reported in one case, wound disruption seen in 8(20%) cases and urinary tract infection was found in 4(10%) cases.

Conclusion: Hysterectomy is widely performed surgical procedure which result in few serious complications. Anemia, UTI and wound infections are its complications. Maternal mortality rate is low as a result of hysterectomy because purpose of this procedure is mainly to save life of the mother. Peripartum period includes time of birth and just after birth. In this period few complications or abnormal conditions indicate hysterectomy for saving life of mother.

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