



CODEN [USA]: IAJPBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF  
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.3521326>Available online at: <http://www.iajps.com>

Research Article

**ANALYSIS OF MATERNAL OUTCOME OF THE  
PERIPARTUM HYSTERECTOMY AMONG PATIENTS IN  
EMERGENCY CONDITION****Dr Alina Tariq, Dr Nigum Irshad, Dr Tayyaba Sultan**  
Lahore General Hospital, Lahore**Abstract:**

**Objectives:** This research work carried out to examine the maternal outcome of Peripartum Hysterectomy in adversely handled patients present with the severe hemorrhage after child birth and rupture of uterus.

**Methodology:** This retroactive research work was carried out in the Department of Gynecology of Lahore General Hospital in the period of two years. Total 30 patients who experienced emergency peripartum hysterectomy in the duration of this research work were the part of this research work. We examined the indications of peripartum hysterectomy as well as linked occurrence of morbidity as well as mortality.

**Results:** Total thirty patients who underwent emergency peripartum hysterectomy were the part of this research work in the duration of this research work. The major frequent indication was the rupture of the uterine (42.90%), followed by the atony of the uterine (26.60%). All the females needed transfusion of blood, 17.0% (n: 5) females developed the co-oculopathy, 13.30% (n: 4) patients were present with injuries to bladder, 6.0% (n: 2) patients were in need of salpingoophorectomy for not controllable adnexal hemorrhage & 6.0% (n: 2) patients had to experience the repeat laparotomy to prevent the internal bleeding. The rate of the maternal mortality was 6.0%.

**Conclusion:** There is very occurrence of the peripartum hysterectomy in our society. High number of parity, high illiteracy rate and unawareness coupled with improper maternity health care services, ill-advised utilization of the syntocinon, and inadequate management at 3<sup>rd</sup> stage, anomalous placentation and atony of the uterine were the main factors involved for the occurrence of the peripartum hysterectomy in emergency condition. The timely decision of the professionals can save the loss of the blood and it can also prevent the related complications.

**KEY WORDS:** Peripartum Hysterectomy, Hemorrhage, Indication, Uterine, Rupture, Morbidity, Mortality, Gynecology, Transfusion, Maternal.

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Please cite this article in press Alina Tariq et al., *Analysis Of Maternal Outcome Of The Peripartum Hysterectomy Among Patients In Emergency Condition.*, Indo Am. J. P. Sci, 2019; 06(10).

**INTRODUCTION:**

Peripartum hysterectomy is the removal of the pregnant uterus by surgical intervention in situ or because of the severe abnormalities of the delivery. This procedure is an essential tool for the saving of life with the administration of the intractable obstetric bleeding not giving response to any other therapy. In the modern gynecology, overall prevalence is 0.050%, but there is a significant disparity in the rates of its occurrence in various regions of the world relying on the obstetric services of the modern world, increase in knowledge about the antenatal care & effective planning of family activities in the society. In the country of Nigeria, the prevalence is one in 3500 & 1.30 out of one thousand births in region of South California. The indications for the emergency Peripartum Hysterectomy contain the atony of uterine. The uterine rupture is the 2<sup>nd</sup> most common indication with overall prevalence of 0.050%. It has increased to the 0.80% after the past previous lower segment CS (Caesarean Section) and 5.0% after the classical section conducted for delivery. This complication is accountable or five percent maternal deaths in USA every year. The prevalence of this complication is very high in the countries which are under development because of the adverse obstetric facilities but the exact figure of the occurrence is not available. There is an increase in the rate of occurrence of anomalous placentation as an indication of this complication. Current research works displayed placenta accreta as one of the main indication. The inversion of the uterine is no common occurring in 1: 6400 to 1: 2100 child births. Sepsis is also a rare cause. There is an increase

in the rate of morbidity as well as mortality in the whole world. The most common complications due to surgical intervention are hemorrhage & injuries to the urinary tract. A very frequent reason of perioperative hemorrhage is the inability to control of artery of uterine or the adnexal vascular pedicle. The most common complications after the surgical intervention are infection & bleeding.

**METHODOLOGY:**

In current research work, we selected the 30 patients of the peripartum hysterectomy in the duration of complete two years whether they gave child birth in the hospital or other health care unit. Counselling with the patients and their family members carried out about the possible requirement of the emergency hysterectomy and we took the consent from every patient of the research work. The transfusion of the blood took place in every patient. Every patient also received prophylactic cover of antibiotic.

All the patients underwent surgical intervention under the impact of GA (General Anesthesia). The most common complications due to surgical intervention were injuries of vascular, uterine, bladder and bowel. The complications after surgical intervention were the abnormalities due to the outcome of the procedure. We recorded all the information on a special organized Performa. The ethical committee of the hospital gave the permission to conduct this research work. SPSS V.16 was in use for the statistical analysis of the collected information.

**RESULTS:**

The average age of the patients of this research work was thirty-one years with a range of age from eighteen to forty-two years as mentioned in Table-1.

No. of Groups	Age of Patients	Frequency	Percentage
I	18 - 22	3.0	10.00
II	23 - 27	4.0	13.34
III	28 - 32	7.0	23.34
IV	33 - 37	14.0	46.66
V	38 - 42	2.0	6.66
Total		30	100

The rate of the parity was from nil to 14. Seven was the median parity as elaborated in Table-2. The major frequent indication for the hysterectomy was the rupture of uterine present in 43.0% (13) patients. The atony of the uterine with no response to uterotonic agents was as an indication present in eight patients (27.0%).

No. of Groups	Parity	Frequency	Percentage
I	00 - 02	2.0	6.66
II	03 - 05	5.0	16.66
III	06 - 08	11.0	36.67
IV	09 - 11	8.0	26.67
V	12 - 14	4.0	13.34
Total		30	100

In seventeen percent patients (n: 5), indication was the anomalous placentation Table-3. We performed the total abdominal hysterectomy in 83.330% (n: 25) patients whereas we carried out sub-total hysterectomy in 16.670% (n: 5) patients (Table-4). The most common complication was the injury to the urinary tract.

Groups	Indication	Frequency	Percentage
1	Ruptured Uterus	13.0	43.00
2	Uterine Atony	8.0	27.00
3	Placenta Accreta	5.0	17.00
4	Extended Uterine Incision	2.0	7.00
5	External Cervical Tears	1.0	3.00
6	Inverted Uterus	1.0	3.00
Total		30	100

Groups	Type of Hysterectomy	No	%
1	Total Abdominal Hysterectomy	25.0	83.33
2	Sub-total Abdominal Hysterectomy	5.0	16.67
Total		30.0	100.00

The most common complications were injury to the urinary tract and hemorrhage as mentioned in Table-5. The mean stay of the patients in the hospital was twelve days with range from seven to twenty-one days as shown in Table-6.

Complications		No of Cases	Percentage
Intra Operative Complications	Urinary Bladder Injury	4.0	13.30
	Adnexal Bleeding	3.0	10.00
	Retroperitoneal Haematoma	2.0	6.60
Postoperative Complications	Coagulopathy	5.0	16.60
	ICU Admission	4.0	13.30
	Pneumonia	4.0	13.30
	Re Exploration Laparotomy	3.0	10.00
	Vaginal Cuff Cellulitis	2.0	6.60
	Acute Renal Failure	4.0	13.30
	Urinary Tract Infection	12.0	40.10
	Wound Infection	5.0	16.60



No. of Groups	Days	No. of Cases (f)	Percentage
I	9 - 10	6.00	20.000
II	10 -12	12.00	40.000
III	13 - 15	8.00	26.670
IV	16 - 18	2.00	6.660
V	19 - 21	2.00	6.670
Total		30.00	100.000

The mean blood amount transfused was 3.50 units as presented in Table-7. The rate of the maternal mortality was 6.65% (n: 2).

No. of Groups	Quantity of Blood Units (500ml/unit)	No. of Patients (f)	Percentage
I	1-2	8.00	26.670
II	3-4	16.00	53.330
III	5-6	4.00	13.330
IV	7-8	2.00	6.670
Total		30.00	100

### DISCUSSION:

This current research work describes that rupture in uterine is most common indication for the emergency peripartum hysterectomy followed by the atony of the uterine & anomalous placentation. These findings are in opposition to the different indications stated from the research works conducted in various developed countries of the world where the main indication is the abnormal placentation. As stated by Clark, the prevalence of the placenta praevia rises from 0.50% in the general public to 3.90% after one CS & reaches up to 10.0% after four CS. The prevalence of the placenta accreta is 5.0% in patients suffering from placenta praevia with only single past caesarean scar to 67.0% with 2 past scar due to CS. The fixation of the anomalous placentation as main indication has interrelation to the reality that the prevalence of the CS increased from 5.50% in the year of 1970 to 16.50% in the year of 1980 & up to 24.70% in the year of 1988. In this current research work, major frequent indication was rupture of uterine as 43.0% which is much same to research works in the past conducted in various hospitals of our country Pakistan as well as research works from many other countries which are under development as Nigeria & Saudia Arabia. In

some other countries as Turkey where there is better obstetric care, the most common indication was the placenta accrete according to one current research work.

Very high prevalence of the uterine rupture in our society shows that widespread unawareness about the complicate process of pregnancy & delivery. Ill-advised trial of the scar & the utilization of the syntocinon in the grand multipara by the conventional attendants of deliveries was the most significant reason. No family planning with the increase in the number of parity has appeared as an important factor as its major reason. The rate of morbidity in this research work was 58.0% which is much high as compared to the other research works. In a research work conducted in USA by Patterson overall, the rate of morbidity was 30.0%, In Jordan as 42.0% & Barclay stated morbidity as 49.70%.

Overall rate of morbidity was approximately similar as stated in a research work conducted in Mayo Hospital, Lahore in past. In the current research work, the important reasons of the high morbidity were sepsis & anemia. There were thirteen percent patients (n: 4)

with the injury to bladder. The rate of the maternal mortality was six percent in contrast to the findings of Engelsen, Castaneda, and Zelop CM. All these patients stated no mortality in their research works. The reason behind the high rate of mortality is the delay in the provision of the health care facilities in consequence of late arrival in the hospital.

### CONCLUSION:

The occurrence of this complication is much high in our community. The main reason for the problem is the ignorance of the public about the severity of this complication. The main indications are the uterine rupture, abnormal placentation & uterine atony. Timely intervention can prevent the dire circumstances.

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