



STUDY OF ETIOLOGY AND MANAGEMENT OF POSTPARTUM HAEMORRHAGE

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ABSTRACT

AIM AND OBJECTIVES: I. To analyze & study different causes and risk factors.

II. To overview different management protocols of postpartum haemorrhage.

III. To study minor and major complication due to postpartum haemorrhage.

IV. To study further maternal morbidity and mortality.

MATERIAL AND METHODS: Tertiary care hospital based observational study was conducted with 240 patients to study etiology and management of post-partum haemorrhage in 2 years. All the data was entered in SPSS 19 and also analyzed through it. Chi-square test was used for the evaluation.**RESULTS:** observational study. The mean age of the patients was 26.58± 5.47 years. 64.2% patients were multigravida and 35.8% patients were primigravida. The rate of vaginal delivery was 47.9% while 52.1% patients delivered through caesarean section. The most common pregnancy related complication was Anemia (41.7%). The most common cause of PPH was uterine atony (35%). 93.3% patients received uterotonics for PPH. In the present study, mortality occurred in 24 (10%)**CONCLUSION:** Early detection of PPH and timely decision making for transfusion are critical. It is also important to improve the identification of women who need to be transferred to another facility and transportation system.**KEYWORDS :** etiology, haemorrhage, postpartum

INTRODUCTION

Postpartum Haemorrhage (PPH) is defined as a blood loss of more than 500 ml in vaginal delivery and 1000ml in cesarean delivery. PPH affects approximately 2% of all women who give birth: it is associated not only with nearly one quarter of all maternal deaths globally but is also the leading cause of maternal mortality in most low-income countries⁽¹⁾

The main causes of PPH are uterine atony, retained placenta, and genital tract trauma. Abnormal placentation, placental abruption, and uterine rupture are less frequent but often responsible for severe PPH with acquired coagulopathy. PPH accounts for nearly one-quarter of all maternal deaths worldwide and an estimated 125,000 deaths occur each year⁽²⁾. Most of the time, these deaths due to obstetric hemorrhage are considered to be potentially preventable⁽³⁾. Problem in India: India alone accounts for over 20 percent of the global maternal deaths.

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- II. To overview different management protocols of postpartum haemorrhage.
- III. To study minor and major complication due to postpartum haemorrhage.
- IV. To study further maternal morbidity and mortality.

MATERIAL AND METHODS

Tertiary care hospital based observational study was conducted with 240 patients to study etiology and management of postpartum haemorrhage in 2 years.

On admission a record of name, age, parity, socio-economic status and a detailed medical and obstetric history was taken. A detailed clinical examination was done. Hb%, BT and CT were estimated when patient had PPH during LSCS. All information was gathered by taking written informed consent. Surgical intervention, mode of delivery and management method was noted.

Criteria for the diagnosis of PPH was bleeding >500 ml following vaginal delivery or >1500 ml following C-section^(5,6). Immediately after the cord was clamped out, the blood collection was started by passing a flat bedpan under the buttocks of a woman. At that time, the collected blood was poured into a standard measuring jar and

its volume measured. To simplify the procedure for measurement of blood loss, any 86 available small gauze swabs soaked with blood were put into the measuring jar and included in the measurement together with the blood and clots.

Study was ethically approved by Ethical Review Committee of our tertiary care Hospital. All the data was entered in SPSS 19 and also analyzed through it. Association among the study groups is assessed with the help of Fisher's test, Student 't' test and Chi square test. 'p' value less than 0.05 is taken significant.

RESULTS

TABLE 1: Distribution of patients according to Age

Age (yrs)	N	%
≤20	10	4.3
20-34	192	80
≥35	38	15.7
Total	240	100
Mean age	26.58± 5.47	

Table 2: Distribution of patients according to Parity

Parity	N	%
Primigravida	86	35.8
Multigravida	154	64.2
Total	240	100

Table 3: Distribution of patients according to Mode of Delivery

Mode of Delivery	N	%
LSCS	125	52.1
Vaginal	115	47.6
Total	240	100

Table 4: Pregnancy related complications among patients

Pregnancy related complications	N	%
Anemia	100	41.7
Pregnancy Induced Hypertension	62	25.8
Preeclampsia	20	8.3
Gestational Diabetes Mellitus	7	2.9

Table 5: Distribution of patients according to Causes of PPH

Cause of PPH	N	%
Uterine atony	84	35
Abruption	58	24.2
Placenta previa	40	16.7
Uterine rupture	24	10
Retained placenta	19	7.9
Coagulopathy	14	5.8

Table 6: Treatment of PPH

Treatment of PPH	N	%
Uterotonics for treatment	224	93.3
Blood products	78	32.5
Therapeutic intravenous antibiotics	58	24.2
Removal of retained products of conception	40	16.7
Manual removal of the placenta	24	10
Massive transfusion	15	6.2
Hysterectomy	10	4.2

Table 7: Maternal Outcomes

Maternal Outcome	N	%
Morbidity	216	90
Mortality	24	10
Total	240	100

DISCUSSION

In the present study, majority of the patients (80%) were in the age group of 20-34 years. The mean age of the patients was 26.58 ± 5.47 years. Kodla CS219 in a cross sectional observational study reported youngest age group was 16 & oldest was 40 years. The mean age was 25.5 ± 4.14 years.

It was observed in present study that the rate of vaginal delivery was 47.9% while 52.1% patients delivered through caesarean section. Kodla CS219 in a cross sectional observational study reported amongst 115 cases, 64 (55.65%) patients delivered vaginally and 47 (40.86%) underwent cesarean section.

The most common pregnancy related complication in present study was Anemia. Kodla CS219 in a cross sectional observational study reported amongst 115 cases, commonest risk factor for obstetric haemorrhage was anemia 53 cases (41.73%).

In the present study The most common cause of PPH was uterine atony (35%) Kodla CS219 in a cross sectional observational study reported amongst 115 patients, most common cause of obstetric haemorrhage was uterine atony

In present study, mortality occurred in 24 (10%) cases. Kodla CS219 in a cross sectional observational study reported amongst 115 cases mortality occurred in 25 cases (21.73%).

CONCLUSION:

Early detection of PPH and timely decision making for transfusion are critical. It is also important to improve the identification of women who need to be transferred to another facility and transportation system.

REFERENCES

1. Khan KS, Wojdyla D, Say L, Gülmezoglu AM, Van Look PF. WHO analysis of causes of maternal death: A systematic review. *Lancet*. 2006;367 (9516): 1066–74.
2. Campbell OM, Graham WJ. *Lancet Maternal Survival Series Steering Group. Strategies for reducing maternal mortality: getting on with what works.* *Lancet*. 2006;368 (9543): 1284–99.
3. World Health Organization. *World Health Organization multicountry survey on maternal and newborn health.* Geneva:WHO; 2012
4. World Health Organization. *Managing complication in pregnancy and childbirth: a guide for midwives and doctors.* Geneva: WHO; 2000. Available from: http://www.who.int/reproductivehealth/publications/maternal_perinatal_health/9241545879/en/index.html
5. Begley CM, Gyte GM, Devane D, McGuire W, Weeks A. Active versus expectant management for women in the third stage of labour. *Cochrane Database Syst Rev*. 2011(11). Available from: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD007412.pub3/abstract>
6. World Health Organization (2005) Attending to 136 Million Births, Every Year. Make

Every Mother and Child Count.. The World Report 2005. World Health Organization, Geneva, 62-63.

7. World Health organization, U.N.C.F, United Nations Population Fund and World Bank (2007) *Maternal Mortality in 2005. Estimates Developed by 129 WHO, UNICEF, UNFPA, and the World Bank.* Geneva. http://www.who.int/reproductivehealth/publications/maternal_mortality_2005/mme_2005.pdf
8. AbouZahr, C. (1998) Antepartum and Postpartum Hemorrhage. In: Murray, L.J. and Boston, A., Eds., *Health Dimensions of Sex and Reproduction*, Harvard School of Public Health on Behalf of the World Health Organization and the World Bank, 165-187