Original Article

Presentation and Management of Primary Postpartum Haemorrhage

Summaira Hamza and Farida Kakar

ABSTRACT

Objective: To find out the various presentations and management of primary postpartum hemorrhage.
Study Design: Descriptive / Cross sectional study
Place and Duration of Study: This study was conducted at Department of Obstetrics and Gynaecology, Boland Medical College Hospital Quetta from February 2014 to March 2015.
Materials and Methods: Total 120 patients having age 20-40 years, who developed PPH within 24 hours of deliveries were selected for this study. Cases of intra-uterine fetal death (IUFD) or chronic medical illness were excluded from the study. Study was approved by ethical review committee and written informed consent was taken from all the patients. Base line investigations of all the patients were done.
Results: Minimum age of the patients of primary PPH was 20 years and maximum age was 40 years with mean age 32.43±6.23 years. In age group 20-25 years there were 36 (30%) patients, in age group 26-30 years 26 (21.67%) patients, age group 31-35 years 19 (15.83%) patients and in age group 36-40 years 39 (32.5%) patients. Primiparious were 36 (30%) followed by Multiparous 81 (67.5%) and grand multiparous were 3 (2.5%). Uterine atony was the commonest cause of primary PPH that was observed in 78(65%) patients. Hysterectomy was done in 50 (41.6%) patients.
Conclusion: Maximum patients found in age group 36-40 years and most of the patients were multiparous. Uterine atony was the most common cause of primary PPH. Hysterectomy was performed in most of the cases.

Key Words: Maternal mortality, Hemorrhage, Primary postpartum, Uterine atony

Citation of article: Hamza S, Kakar F. Presentation and Management of Primary Postpartum Haemorrhage. Med Forum 2017;28(2):120-122.

INTRODUCTION

Postpartum hemorrhage is a global issue and is important cause of maternal maternal mortality and morbidity worldwide. WHO defines PPH "as blood loss, exceeding 500 ml from genital tract, after delivery of baby".[1] According to American College of Obstetric & Gynecology (ACOG) "a hematocrit (Hct) fall of 10% or a hemorrhage that requires blood transfusion.[2,3] It is leading cause of death in Pakistan and over 25,000 women die to PPH each year.3 Postpartum haemorrhage is of two types, primary PPH occurs within the 24 hrs of delivery while secondary PPH occurs after 24 hours upto 6 weeks after delivery.[4]
Uterine atony is the commonest cause (>90%) and occurs due to failure of contraction or retraction of myometrium to occlude sinuses embedded in it.[5] Retained placental tissue or membrane may prevent good placental site retraction, so is another cause of PPH.[6] Beside these two, genital tract lacerations and coagulopathy are also causal factors of PPH.[7] Certain risk factors are also known to be associated with each cause specific cause, like over distension of uterus in case of multiple gestation, polyhydromnios, macrosomia. Similarly exhausted uterus in case of augmentation or induction of labour and infection may be associated with uterine atony. Uterine anomalies, scaring of uterine wall or abnormally adherent placenta may lead to retained product of conception. Similarly for genital tract lacerations, instrumental delivery and macrosoma may be the associated factors. For coagulopathy abruption placenta is a known association.[2-4]
It is important to identify the cause of PPH to manage the condition appropriate and to prevent fatal consequences of PPH. Along with mortalities prevention of morbidities is equally important.[7] Management of PPH comprises of general measures for any cause and specific management for particular cause including medical treatment or surgical intervention.[8] Complications of PPH include hypovolumic shock, which in turn leads to acute renal failure (ARF), adult respiratory distress syndrome (ARDS) and Sheehan's syndrome. Blood transfusion related complications like transfusion reaction or transmission of certain viral disease. Disseminated intravascular coagulopathy (DIC) is also a common complication.[8,9] Maternal morbidity and mortality rises with delay in diagnosis

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Received: November 17, 2016; Accepted: December 30, 2016

and intervention, thus the cornerstone of effective management is rapid diagnosis and intervention.[10]

MATERIALS AND METHODS

This was a cross sectional study conducted at Depart Department of Obstetrics and Gynaecology, Boland Medical College Hospital Quetta from February 2014 to March 2015. Total 120 patients having age 20-40 years, who developed PPH within 24 hours of deliveries were selected for this study. Cases of intra-uterine fetal death (IUFD) or chronic medical illness were excluded from the study. Study was approved by ethical review committee and written informed consent was taken from all the patients. Base line investigations of all the patients were done. Causes of primary PPH were evaluating by examining the patient. All the causes like atonic uterus, retained placental tissue or membrane, genital tract laceration (extended episiotomy, perineal, vaginal, cervical or uterine tear) and coagulopathy were recorded on predesigned proforma. Standard medical management was given to all the patients. Surgical management was given if medical management failed. All the collected data was entered in SPSS version 18. Mean and SD was calculated for numerical variables and categorical data was presented as frequencies as percentages.

RESULTS

Minimum age of the patients of primary PPH was 20 years and maximum age was 40 years with mean age 32.43±6.23 years. Patients were divided into 4 age groups i.e. age group 20-25 years, 26-30 years, 31-35 years and 36-40 years. In age group 20-25 years there were 36 (30%) patients, in age group 26-30 years 26 (21.67%) patients, age group 31-35 years 19 (15.83%) patients and in age group 36-40 years 39 (32.5%) patients (Table 1). Primiparious were 36 (30%) followed by multiparous 81 (67.5%) and grand multiparous were 3 [2.5%] (Table 2).

Table No.1: Age distribution (n = 120)

Age (years)	No.	%
20-25	36	30.0
26-30	26	21.67
31-35	19	15.83
36-40	39	32.5

Table No.2: Frequencies of parity

Parity	No.	%
Primiparious (Po)	36	30
Multiparous (P1-4)	81	67.5
Grand multiparous (P≥5)	3	2.5

Uterine atony was the commonest cause of primary PPH that was observed in 78(65%) patients followed by retained placental tissue or membrane, 19(15.83%) patients, vaginal wall laceration 8(6.67%), cervical tear 4(3.33%), retained placenta 4 (3.33%), perineal tear 4 (3.33%) and extended episiotomy was observed 3 (2.5%) patients (Table 3). Hysterectomy was done in 50 (41.6%) patients, followed by B lynch suture was done in 1 (0.8%), internal iliac artery ligation 1 (0.8%), evacuation (12 (10%), manual removal of placenta 20 (16.67%), medical management 8 (6.7%) and perennial and cervical tear repair was done in 28 (23.4%) cases (Table 4)

Table No.3: Frequency of causes of primary PPH

Causes of primary PPH	No.	%
Uterine atony	78	65.0
Retained placental tissue or membrane	19	15.83
Vaginal wall laceration	8	6.67
Cervical tear	4	3.33
Retained placenta	4	3.33
Perineal tear	4	3.33
Extended episiotomy	3	2.5
Uterine tear	-	-
Coagulopathy	-	-

Table No.4: Frequencies for different management options

Management	No.	%
Hysterectomy	50	41.6
B-lynch suture	1	0.8
IIAL (Internal iliac artery ligation)	1	0.8
Evacuation	12	10.0
Manual removal of placenta	20	16.7
Medical management	8	6.7
Perennial & cervical tear repair	28	23.4

DISCUSSION

Primary postpartum haemorrhage is the blood loss of 500 ml or more in the 1st 24 hours of delivery of baby.[11] The prevalence varies from 4.5% to 19%. It is associated with significant maternal mortality and morbidity.[12-13] In developing countries, 28% maternal deaths are caused by PPH prevalence in Pakistan is 34%.[10]

Minimum age of the patients of primary PPH was 20 years and maximum age was 40 years with mean age 32.43±6.23 years. In age group 20-25 years there were 30% patients, in age group 26-30 years 21.67% patients, age group 31-35 years 15.83% patients and in age group 36-40 years 32.5% patients. The largest incidence was seen in patients aged between 36-40 years (60%). Age influence the occurrence of PPH. Advancing age is associated with primary PPH. In some studies the highest incidence of PPH was found in women more than 30 years of age.[1,14] Kashanian et al[12] found decreases blood loss with increasing age and greatest blood loss found to occur in mothers aged 15-

19 years. But in the present study age limit was between 20-40 years.

In present study primiparas with PPH were 30% followed by multiparous 67.5% and grand multiparous were 2.5%.

Magann[15] reported frequency of Primiparious as 41% which is higher than our study. But Hazara et al[9] reported frequency of primiparas as 29% which is comparable with our study. In a study conducted by Khanum[5] found 18% primiparous, 25% multiparous and 57% grand multiparous which differ from this study. The commonest cause of primary PPH was found to be uterine atony (65%). It was similar to the other local and international studies.[1, 5, 13] In present study the most common procedure was hysterectomy which was performed in 41.6% patients.

In present study, hysterectomy was performed in 41.66% patients. In countries with high resources, haemorrhage which requiring hysterectomy is supposed life threatening condition.[16-17] Sheikh et al reported in their study that uterine atony was one of the most common cause of PPH.[1]

CONCLUSION

Maximum patients found in age group 36-40 years and most of the patients were multiparous. Uterine atony was the most common cause of primary PPH. Hysterectomy was performed in most of the cases.

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

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Original Article

Risk Factors and Complications of MI

Clinical Profile, Risk Factors, Complication and Hospital Outcome of Acute Myocardial Infarction among Patients in Coronary Care Unit Nishtar Hospital, Multan

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ABSTRACT

Objective: To find out facts about clinical sign and symptoms, causing factors and complications of Acute MI among patients

Study Design: Descriptive / cross sectional study.

Place and Duration of Study: This study was conducted at the Coronary Care Unit, Nishtar Hospital Multan from April to December 2016.

Materials and Methods: Data were collected from 100 patients admitted to coronary care unit of Nishtar Hospital Multan, tertiary health care center. Patients 18 years of age or above admitted in the coronary care unit of Nishtar Hospital Multan, with acute myocardial Infarction, ST segment elevation Myocardial infarction, Myocardial infarction less than 48 hours old were included while Patients less than 18 years of age, Myocardial infarction 48 hours old or more, on ST segment elevation myocardial infarction were excluded.

Results: Smoking (76%) and high blood pressure (23%) were the most common risk factors, followed by dyslipidemia (22%) in this study. The overall hospital mortality rate for this study was 15% -10 for males (66.7%) and 5% for females (33.3%).

Conclusion: Arrhythmias continue to be the most common complication of acute myocardial infarction, particularly during the first 48 hours. Acute myocardial infarction is a serious disease that has to be treated in intensive care unit of coronary heart disease. Death usually occurs with arrhythmia, and is a potentially reversible condition, the earliest treatment that can reduce mortality

Key Words: Myocardial infarction, hospital outcome, Clinical profile

Citation of article: Asif R, Yasmeen S, Imran M. Clinical Profile, Risk Factors, Complication and Hospital Outcome of Acute Myocardial Infarction among Patients in Coronary Care Unit Nishtar Hospital, Multan. Med Forum 2017;28(2):123-125.

INTRODUCTION

It is impossible to find the first person to observe changes in cardiac rhythm. However, medical history reviews in this regard are helpful in identifying at least a few milestones in understanding this clinical problem. In ancient times it is said that the Egyptians were aware for the importance of impulse examination The Chinese believed it as a key to diagnosing many conditions in the 6th century BC.

Only at this time, it is said that Ayurveda doctors know 600 types of pulses. In 1628, Sir William Harvey described the circulation of blood; in 1776, William Withering recognized the irregular pulse of atrial fibrillation. In 1835, Boull and recognized the pulse, two important abnormalities, which he called pulsed intermittent and ataxia (possibly atrial fibrillation).

Coronary care unit provide a wealth of knowledge about the incidence of arrhythmias and the prognosis of acute myocardial infarction in hospitalized patients. Coronary artery disease in the Pakistanis risk is 3-4 times higher than the United States white, six times higher than China. In Asian s[1] the prevalence of coronary artery disease has to be viewed with concern. Pakistanis are susceptible to coronary artery disease as a community at a very young age [2.]

In a study by SZ Abildstrom et al.[3], the risk of sudden cardiac death compared to sudden cardiac death was relatively high in younger groups, but absolute severe cardiac death was higher in the upper age group than younger.

In the Framingham Heart Study of male majority observed [4.]

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Received: January 17, 2017; Accepted: February 20, 2017