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Original Research Article

Management of post partum haemorrhage (PPH)

Sweta Lal[1],*, Snehlata[2]

[1]*Dept. of Obstetrics and Gynaecology, Hazaribag Medical College, Hazaribag, Jharkhand, India*
[2]*Hazaribag Medical College, Hazaribagh, Jharkhand, India*

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ABSTRACT

Background: Postpartum haemorrhage is a disease or a condition which occurs in the women at the time of delivery. The prevalence of this disease is very rare, and it is most likely to occur at the time of caesarean birth. The incidence of postpartum haemorrhage is high, and the excessive blood loss can cause a significant drop in the mother's blood pressure which might lead to death. Thus, it is important to manage this condition in an effective manner.
Aim: The aim of the present study is to explore the management of postpartum haemorrhage.
Material and Methods: This was a cross sectional study which is being conducted on the diagnosed patients of postpartum haemorrhage which were being admitted at Hazaribagh Medical College, Hazaribagh, Jharkhand. This study was being conducted for the duration of 1 year. In this study 80 patients were being selected on the basis of inclusion and exclusion criteria.
Results : As per the decision made by the doctors or the consultants, different management practices are being applied on different patients. All the patients have received the active management of third stage of labour. In the present study, the patients were being managed by both the surgical management methods or practices and the medical management practices. Medical management was given to the patients such as 30 patients were being given uterotonic drugs and 24 patients were given bimanual uterine compression. Along with this, the surgical treatment was given such as 15 patients were managed with removal of retained placenta, 3 patients were managed with uterine artery ligation, 3 patients had managed with internal iliac, 2 patients are managed with artery ligation, 1 patient was managed with hysterectomy, and 20 were managed through balloon tamponade method. The balloon tamponade method stopped bleeding in all the cases
Conclusion : The present study is being conducted for exploring the different management practices used for the treatment of postpartum haemorrhage. In this study, it is being found that both medicinal and surgical methods are being used for the treatment of postpartum haemorrhage. Two different methods are included under medicinal methods such as uterotonic drugs and bimanual uterine compression were being used for the treatment of postpartum haemorrhage. On the other hand, in the surgical methods different processes are being used such as Removal of retained placenta, Hysterectomy, Artery ligation, Internal iliac, Uterine artery ligation, and balloon tamponade. The balloon tamponade is an effective method to control intractable PPH. It is an easy procedure which does not require expertise to use. Hence it proves to an invaluable tool, especially in places with low resource settings.

1. Background

Death at the time of pregnancy is a major issue which needs to be addressed and different diseases or the conditions which occur at the time of the pregnancy needs to

* *Corresponding author*.
E-mail address: drsweta2004@gmail.com (S. Lal).

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be managed effectively. It is being estimated that the prevalence of female death at the time of pregnancy is high.[1]

Postpartum haemorrhage is a disease or a condition which occurs in the women at the time of delivery. The prevalence of this disease is very rare, and it is most likely to occur at the time of caesarean birth. Postpartum haemorrhage is referred to as the disease or a condition in which the female loss blood at the time of pregnancy.[2]

This disease is being considered as a significant cause of death related to pregnancy worldwide. The incidence of postpartum haemorrhage is found that around 1-5% of the deliveries in both developing and the developed countries and is also a common cause of maternal mortality and morbidity. Postpartum haemorrhage is being classified into two different types which are primary and the secondary postpartum haemorrhage. The Postpartum haemorrhage is being defined as primary when the blood loss is more than 500ml at the time of vaginal delivery and for C section if the blood loss is more than 1500ml, then it is being termed as primary postpartum haemorrhage.[3] On the other hand, the secondary postpartum haemorrhage is being defined as the excessive vaginal blood loss within 24 hours after the end of the third stage of the labour.[4]

The identified causes of postpartum haemorrhage include uterine atony, remaining products of conception, placenta previa, uterine, morbidity adherent placenta and cervical or vaginal tear.[5] The major risk factors associated with postpartum haemorrhage include the conditions such as placental abruption, overdistended uterus, multiple pregnancies, having many previous births, infections, obesity, prolonged labour, gestational hypertension, high blood pressure of pregnancy, general anaesthesia, medications to induce labour, medications used for stopping contractions and placenta previa.[6]

The different symptoms of postpartum haemorrhage include uncontrolled bleeding, increased heart rate, decrease in the blood pressure, swelling in the tissues in the vaginal area and decreased red blood count.[7] As the incidence of this postpartum haemorrhage is high, and the excessive blood loss can cause a significant drop in the mother's blood pressure which might lead to death. Thus, it is important to manage this condition in an effective manner.[8]

2. Aim

The aim of the present study is to explore the management of postpartum haemorrhage.

3. Material and Methods

This was a cross sectional study which is being conducted on the diagnosed patients of postpartum haemorrhage which were being admitted at Hazaribagh Medical College, Hazaribagh, Jharkhand. This study was being conducted for the duration of 1 year. In this study 100 patients were being selected on the basis of inclusion and exclusion criteria and an informed concern is being taken by the patient itself and also by the attendances.

3.1. Inclusion criteria

1. Patients with blood loss more that 500ml and 1000ml after the vaginal and caesarean delivery respectively were being selected.
2. Patients with excessive bleeding which makes the patients symptomatic were being included in the study.

3.2. Exclusion criteria

1. Participants who were not giving the concern were not included in the study.
2. Females who were too much unwell are being excluded from this study.

4. Results

Table 1: Age

Age (years)	Frequency	Percentage
18-24	32	32.0
25-28	42	42.0
29-35	15	15.0
35 and more than 35	11	11.0

In the present study the participants were belonging to different age groups such as 32 patients (32.0%) belong to the age of 18-24 years of age, 42 patients (42.0%) were belonging to the age of 25-28 years, 15 patients (15.0%) were belonging to the age of 29-35 years of age and 11 patients (11.0%) belong to the age group of age 35 and more than 35.

Table 2: Blood Loss

Blood Loss (ml)	Frequency	Percentage
500-999	32	32.0
1000-1499	40	40.0
1500-1999	21	21.0
2000-2499	7	7.0

In the present study it is being found that blood loss was 500-999 (ml) in 32 patients (32.0%), 1000-1499 (ml) in 40 patients (40.0%), 1500-1999(ml) in 21 patients (21.0%) and 2000-2499(ml) in 7 patients (7.0%).

As per the decision made by the doctors or the consultants different management practices are being applied on different patients. All the patients have received the active management of third stage of labour. In the present study the patients were being managed by both the surgical management methods or practices and the medical management practices. Medical management was given to the patients such as 30 patients were being given

Table 3: Management

Management	Frequency	Percentage
Medical Management		
Uterotonic drugs	30	30.0
Birmanual uterine compression	24	24.0
Surgical Management		
Removal of retained placenta	15	15.0
Uterine artery ligation	3	3.0
Internal iliac	3	3.0
Artery ligation	2	2.0
Hysterectomy	1	1.0
Balloon Tamponade	20	20

uterotonic drugs and 24 patients were given bimanual uterine compression. Along with this the surgical treatment was given such as 15 patients were managed with removal of retained placenta, 3 patients were managed with uterine artery ligation, 3 patients had managed with internal iliac, 2 patients are managed with artery ligation, 1 patient was managed with hysterectomy, and 20 were managed by balloon tamponade.

5. Discussion

In the present study the participants were belonging to different age groups such as 27 patients belong to the age of 18-24 years of age, 37 patients were belonging to the age of 25-28 years, 10 patients were belonging to the age of 29-35 years of age and 6 patients belong to the age group of age 35 and more than 35. On comparing this with the study of Thawal, et. al., (2019)[9] in their study it is being found that the majority of the patients belong to the age group of 25-28 years and least number of patients belong to the age of 35 and more, according to which both the studies had found the prevalence of postpartum haemorrhage between same age groups.

In the current study it is being found that the blood loss was found to be 500-999 (ml) in 27 patients, 1000-1499 (ml) in 35 patients, 1500-1999(ml) in 16 patients and 2000-2499(ml) in 2 patients. In the study of Thawal, et. al., (2019) it was being found that the 28 participants had blood loss between 500-999 ml, 37 participants had blood loss between 1000-1499 ml, 12 participants had blood loss between 1500-1999 ml and 3 participants had blood loss between 2000-2499 ml.

In the current study the patients were being managed by both the surgical management methods or practices and the medical management practices. Medical management was given to the patients such as 30 patients were being given uterotonic drugs and 24 patients were given bimanual uterine compression. Along with this the surgical treatment was given such as 15 patients were managed with removal of retained placenta, 3 patients were managed with uterine artery ligation, 3 patients had managed with internal iliac, 2 patients are managed with artery ligation, 1 patient was managed with hysterectomy, and 20 were managed with balloon tamponade technique. The balloon tamponade method stopped bleeding in all the cases.

On comparing this with the study of Thawal, et. al., (2019) in their study it is being found that the 56 (70.0) cases had medical management and 24 (30.0) cases had surgical management. Also, in the study of Edhi, et. al., (2013)[10] it is being found that different management processes which are being used for the treatment of the primary and secondary postpartum haemorrhage. In this study the management processes which were being used for treating the primary postpartum haemorrhage was found such as for majority of the patient's hysterectomy was done in 8 patients, repair of cervical and vaginal tear was done in 6 patients, internal iliac ligation was done in 2 patients and replacement of uterine inversion was done in 2 patients. Also, for the secondary postpartum haemorrhage the treatment methods were found such as evacuation of the remining products of conception was done in 8 patients.

6. Conclusion

Postpartum haemorrhage is one of the major issues which is being encountered at the time of pregnancy and is major cause of the death at the time of delivery. The present study is being conducted for exploring the different management practices used for the treatment of postpartum haemorrhage. In this study it is being found that both medicinal and surgical methods are being used for the treatment of postpartum haemorrhage. Two different methods are included under medicinal methods such as uterotonic drugs and bimanual uterine compression were being used for the treatment of postpartum haemorrhage. On the other hand, in the surgical methods different processes are being used such as Removal of retained placenta, Hysterectomy, Artery ligation, Internal iliac, Uterine artery ligation, and balloon tamponade method. The balloon tamponade is an effective method to control intractable PPH. It is an easy procedure which does not require expertise to use. Hence it proves to an invaluable tool, especially in places with low resource settings.

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8. Conflicts of Interest

No conflicts of interest.

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Author biography

Sweta Lal, Assistant Professor

Snehlata, Specialist Medical Officer

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