



PLACENTA PREVIA AND BLOOD TRANSFUSION

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ABSTRACT

Background: Placenta previa is abnormal placentation in lower uterine segment near or over os. In placenta previa there is bleeding and this is from the thinned out lower segment, which does not contract as well as the upper uterine segment. It is the leading cause for major obstetric haemorrhage among pregnant patients in antenatal period and a potential factor for increased maternal mortality rate in pregnancy. Here the aim is to study the need of blood transfusion in placenta previa. **METHODS** This retrospective study was conducted on 69 patients with placenta previa. They underwent LSCS. The surgery was kept as elective LSCS in non-bleeding patient and as an emergency LSCS in bleeding patient. The primary outcome was to find the need of blood transfusion for peripartum blood loss. **RESULTS** Out of 69 patients, 40 were emergency surgery (58%) and rest 29 were elective surgery (42%). It was found that 92.8% required blood transfusion. 71.1% needed 1-2 units, 15.9% needed 3-4 units and 5.8% needed >4 units of blood. 21 cases out of 29 elective cases needed blood transfusion (72.4%). **CONCLUSION** Majority of the patients with placenta previa undergoing caesarean section need blood transfusion for peripartum blood loss.

KEYWORDS : Placenta previa. Peripartum haemorrhage. Obstetric haemorrhage estimation

INTRODUCTION

Placenta previa is defined as "placenta that is partially or wholly situated in lower uterine segment".¹ The incidence of placenta previa is different from one series to another. A low-lying placenta occurs in 5% of pregnancies at 16-18 weeks of gestation but are evident in only 0.5% of pregnancies at term.² Obstetric haemorrhage as a result of placenta previa has increased the need for blood transfusion and postpartum hysterectomy. This also increases the risk and complication rate in delivery. The maternal mortality due to postpartum haemorrhage is extensive among placenta previa population.³

The average blood loss in patient undergoing hysterectomy in placenta previa cases demands unavoidable blood transfusion. Among the placenta previa types—accreta, increta and percreta—the accreta patients are likely to have high amount of blood loss.³

Over 50% of women with placenta previa delivered by caesarean section had blood transfusions.⁴ Previous studies have found that the type of anaesthesia⁵ and surgery⁶ have a great impact on blood loss and transfusion. Presurgical determination of risk factors for massive bleeding enables a multidisciplinary team approach and sufficient blood preparation, possibly leading to better outcome. Some factors such as old age, invasive placenta, patients presenting with severe bleeding in emergency have been associated with massive blood requirement during surgery.^{7,8,9,10}

METHODOLOGY

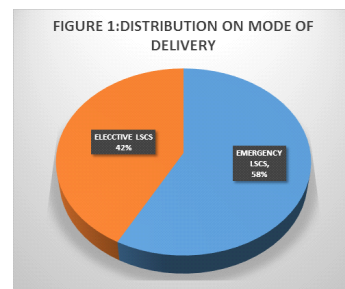
This prospective study was conducted in department of Obstetrics and Gynaecology of Gauhati Medical College and Hospital, Guwahati, Assam from 1st June 2019 to 31st May 2020. Gauhati Medical College is a tertiary care hospital and it is a referral centre for all complicated cases from every district of Assam. Two groups were formed—Group 1—emergency surgery—in 40 deliveries and Group 2—elective surgery—in 29 deliveries.

Laboratory criteria for haemoglobin levels in prepartum and postpartum were included in the study.

All patients with placenta previa were identified. Some of the patients were asymptomatic while others presented with antepartum bleeding. Detailed history regarding gestation age at the onset of bleeding, severity and episodes of bleeding was recorded. Patients were taken for elective surgery when there was no bleeding and after the patients attained term pregnancy. Patients posted for emergency LSCS when they land up with heavy bleeding, irrespective of gestational age.

RESULT

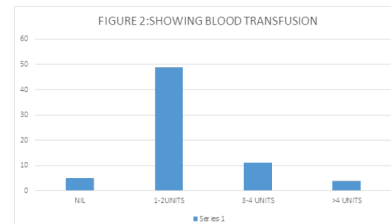
Out of 69 patients, 40 were emergency surgery (58%) and rest 29 were elective surgery (42%).



In this study, 71.1% needed 1-2 units, 15.9% needed 3-4 units and 5.8% needed >4 units of blood

TABLE 1: DISTRIBUTION OF BLOOD UNITS

Units of blood	No of patients	Percentages
Nil	5	7.2%
1-2	49	71.1%
3-4	11	15.9%
>4	4	5.8%

**DISCUSSION**

Placenta previa is one of the dreaded complications in obstetrics due to its associated adverse maternal and perinatal outcome. The present study is to find out the need of blood transfusion in patients of placenta previa in Gauhati Medical College and Hospital, Guwahati, Assam.

In my study out of 69 patients, 40 went for emergency LSCS and 29 patients were taken for elective LSCS. Ojha N et al (2012) found emergency LSCS in 57% cases. Rangaswamy et al (2016) found in their study that 95.1% of cases were delivered by LSCS and 84.7% as

emergency LSCS and 15.4% as elective LSCS. In my present study it was found that 92.8% required blood transfusion. In this study, 71.1% needed 1-2 units, 15.9% needed 3-4 units and 5.8% needed >4 units of blood. Parikh P M et al found 73.4% blood transfusion. Lavanyakumari et al found 70% blood transfusion. Kaur et al (2017) found 70% blood transfusion in placenta previa cases. Larger requirement of blood transfusion in the present study is attributed to pre-existing anemia in the patients, also more numbers of major degree placenta previa.

CONCLUSION

Our study result shows majority of patients with placenta previa undergoing caesarean section are in need of blood transfusion. This helps the surgeon to proactively prognosticate the patient party regarding need of blood and also alerts the surgeon to carefully manage with sufficient preparation for blood transfusion.

Ethics Committee Approval Ethics committee approval was received for this study from institutional ethics committees

Conflict of interest: none declared

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