

PLACENTA PRAEVIA- TIMELY DECISION MANDATORY!

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ABSTRACT**BACKGROUND**

Antepartum Haemorrhage (APH) is still a grave obstetric emergency contributing to a significant amount of maternal and perinatal morbidity and mortality in our country. Placenta Praevia (PP) complicates 0.33%¹ to 0.55%² of all pregnancies. This study is to evaluate how far we have come and the effect of treatment on the perinatal and maternal outcome and study the maternal and foetal outcome in placenta praevia and its prevalence in tertiary care hospital.

The aim of the study is to study the maternal and foetal outcome in placenta praevia and assess the importance of early diagnosis and treatment. Objective of the study was to determine the cause of placenta praevia and assess the value of current obstetric practice in managing placenta praevia.

MATERIALS AND METHODS

Prospective study was carried out in a tertiary care hospital on 60 patients who presented with PP in the ANC OPD and in emergency over a period of 2 years with gestational age >28 weeks and no blood dyscrasias or bleeding source other than the uterus.

RESULTS

Maximum cases (69.11%) were unbooked, more in multiparous (41.67%) and commonly associated with previous caesarean section (41.6%). 41.46% belonged to 25-29 years of age. 56.67% were more than 36 weeks of gestation at the time of admission. Out of 60, 9 (15%) had absent foetal heart sound and 6 (10%) had foetal distress at time of admission. 56 (93.3) cases delivered by caesarean section, 29 (48.3%) cases were elective, while 27 (45%) were done in emergency. 1 (1.6%) underwent caesarean hysterectomy. 16 (26.6%) had PPH postoperatively managed by medical methods. 2 (3.3%) had scar dehiscence and 3 (5%) patients went in sepsis. Commonest complication (26.67%) was anaemia. 5 (8.3%) babies of placenta praevia were premature.

CONCLUSION

Placenta praevia constitutes 35% of the causes of placental bleeding leading to antepartum haemorrhage, which is a leading cause of maternal morbidity. Hence, timely diagnosis and intervention is of paramount importance to prevent mortality and morbidity.

KEYWORDS

Placenta Praevia (PP), Postpartum Hysterectomy, Antepartum Haemorrhage (APH), Postpartum Haemorrhage (PPH).

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BACKGROUND

Vaginal bleeding at any stage of pregnancy is a matter of great concern for patient as well as her doctor. Antepartum haemorrhage is still a grave obstetric emergency contributing to a significant amount of maternal and perinatal morbidity and mortality in our country. Placenta praevia refers to a placenta that is partially or wholly located in the lower uterine segment. By convention, lower segment is taken to be that part of uterus, which falls within 5 cm of

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internal cervical os. Placenta praevia complicates 0.33%¹ to 0.55%² of all pregnancies and accounts for one third of all cases of APH. The maternal complications in patients with APH are malpresentation, premature labour, postpartum haemorrhage, sepsis, shock and retained placenta. Various foetal complications are premature baby, low birth weight, intrauterine death, congenital malformation and birth asphyxia.³ For APH, during pregnancy, timely and aggressive treatment will go a long way in further reducing the maternal and foetal morbidity and mortality. This study is to evaluate how far we have come and the effect of treatment on the perinatal and maternal outcome.

Aim-

- To study the maternal and foetal outcome in placenta praevia.
- To assess the importance of early diagnosis and treatment.



Study Objective

1. To emphasise the importance of early diagnosis and prompt treatment in the improvement of maternal and perinatal outcome.
2. To determine the cause of placenta praevia.
3. To assess the value of current obstetric practice in managing placenta praevia.

MATERIALS AND METHODS

A prospective study was carried out in the Department of Obstetrics and Gynaecology at Indira Gandhi Government Medical College, Nagpur, on 60 patients after approval from the Ethics Committee who presented with placenta praevia in the ANC OPD and in emergency. This study was carried out over a period of 2 years from December 2013 to November 2015. All cases of placenta praevia with gestational age >28 weeks were included. Patient suffering from any other bleeding disorder or bleeding from a source other than uterus are excluded. Any previous history of placenta praevia was specifically enquired for. History of previous caesarean section, hysterotomy or previous dilatation and curettage was taken.

RESULTS

Out of 60 cases of placenta praevia, 36 cases (69.11%) were unbooked cases and 24 (30.89%) were booked cases. Maximum patients belonged to 25-29 years of age (53.34%) and it was more common in multiparous (86.68%). 34 cases (56.67%) were more than 36 weeks of gestation at the time of admission. Out of 60 cases, 9 (15%) had absent foetal heart sound and 6 cases (10%) had foetal distress at the time of admission. Placenta praevia is more commonly associated with history of previous caesarean section. 25 cases (41.67%) had history of previous caesarean section. 56 cases (93.33%) delivered by caesarean section. Elective caesarean section was done in 29 cases (51.78%), while rest of the 27 cases (48.2%) was done in emergency. 17 cases (30.35%) underwent emergency caesarean section due to haemorrhage; this being the most common indication. One patient (1.67%) of placenta praevia had history of placenta accreta for which caesarean hysterectomy was done. Other emergency indications included 9 cases (16.07%) of foetal distress and 1 case (1.78%) of transverse lie. Commonest complication was anaemia (55%). 16 cases (26.67%) of placenta praevia had postpartum haemorrhage postoperatively managed by medical methods. Two cases (3.34%) had scar dehiscence and in three cases (5%) patients went in sepsis.⁵ Babies (8.3%) of placenta praevia were premature. 21 babies (35%) suffered from neonatal jaundice. There was 1 case (1.67%) of birth asphyxia and 1 case (1.67%) of hyaline membrane disease. 20 babies (33.34%) had low birth weight.

In the day-to-day practice, an obstetrician has to tackle the life-threatening condition of antepartum haemorrhage and take a timely judicious decision of terminating pregnancy keeping in mind the welfare of both the mother and the foetus without exposing either of them to undue risk.

Antepartum haemorrhage is described as bleeding from and into the genital tract after the 28th week of pregnancy and before the end of the 2nd stage of labour, 1945. Over the second half of 20th century, increased use of blood transfusion, hospitalisation, placental localisation and gestational age assessment by USG and accordingly timely termination of pregnancy along with development of the neonatal intensive care unit appear to have contributed to a dramatic reduction in the maternal and perinatal mortality and morbidity.

To study the effect of antenatal care on maternal and foetal outcome in placenta praevia, patients were divided into booked and unbooked. Patient without a single ANC visit was labelled as unbooked and patients who had a one or more ANC check-ups in our hospital were labelled as booked. In this study, 36% patients were unbooked.

FHS indicates foetal wellbeing. Its presence shows viable foetus, while absence indicates dead foetus. Absence of FHS or evidence of foetal distress was important in gauging the condition of foetus and the obstetric management of patient partially depends on this. In this study, 45 cases (75%) had normal FHS, 9 cases (15%) had absent FHS and 6 cases (10%) had foetal distress at admission.

The results of our study are similar to that of Chakraborty et al (1993)¹ who reported that normal FHS was present in 72.56% of placenta praevia patients.

Increasing age has been implicated as a predisposing factor to placenta praevia. In this study, mean age of patients of antepartum haemorrhage was 25-29 years. In placenta praevia, patient's mean age was 25-29 years. Paul Pedowitz (1965)³ and B. Das (1975)⁴ have also reported maximum number of cases in the same age group. Ananth et al (1996)⁵ who found increased incidence of placenta praevia with advancing age.

In this study, it was observed that the incidence of antepartum haemorrhage was more common in multipara than in nullipara and the mean parity was 1.6 ± 1.3 . The incidence of placenta praevia was 5 times higher in multipara than primipara. Chakraborty et al (1993)¹ reported that prevalence of antepartum haemorrhage was higher among the multigravidas. Results of this study are consistent with study of Cotton et al (1980)⁶ who found that 83.2% of their patients with placenta praevia were multiparous and 16.78% were nulliparous. Crenshaw et al (1973)⁷ reported that 10% patients with placenta praevia were primigravida.

In this study, 75 patients (57.25%) had a period of gestation more than 36 weeks of gestation at the time of admission. 34 patients (56.67%) of placenta praevia group had a period of gestation more than 36 weeks at the time of admission. Mean period of gestation at the time of admission was more than 36 weeks.

In this study, history of prior LSCS was found in 25 cases (41.67%) of placenta praevia patients.

This is comparable to study of Gilliam et al (2002)⁸ and Taylor et al (1994)⁹ who found that 20% cases and 15% cases of placenta praevia respectively in their studies had a history of previous caesarean section.

The results of this study are indicative of increased incidence of placenta praevia probably because of unregistered cases, low socioeconomic strata, anaemia and Asian origin and prevalence of previous caesarean section and D and C.

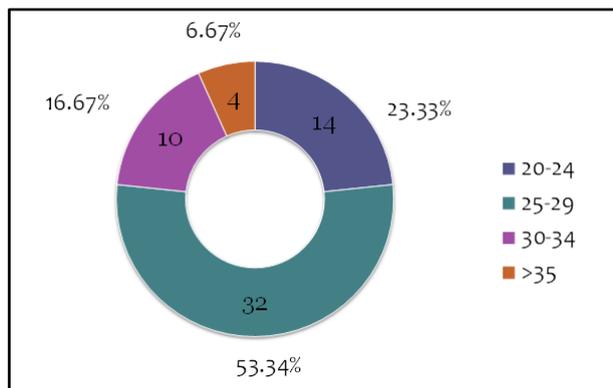
However, the incidence of placenta praevia is lower in western literature. Taylor et al (1995)⁹ observed higher incidence of placenta praevia in women of Asian origin.

This study showed that 7 cases (11.67%) of placenta praevia had a previous history of abortion, which is consistent with study of Taylor et al (1994)⁹ who found that 30% patients of placenta praevia had a previous history of abortion. Similarly, Johnson LG (2003)¹⁰ and Chapman GL (1986)¹¹ noted increase in prevalence of placenta praevia in women who had undergone abortion earlier.

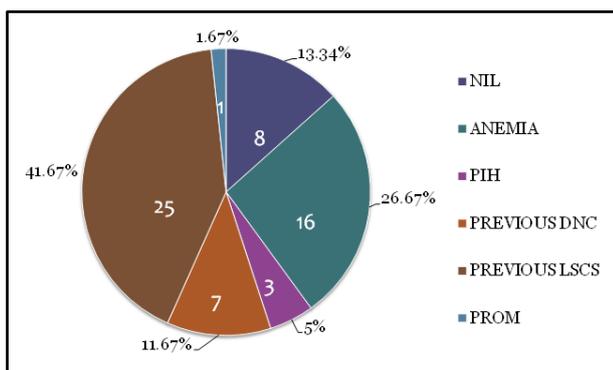
One case (1.67%) in placenta praevia group had history of PROM. This was not found to be statistically significant in present study.

In this study, 3 patients (7.5%) with placenta praevia had pregnancy-induced hypertension. Hibbard et al (1966)¹² found incidence of hypertensive disorders of pregnancy was 7.4% in antepartum haemorrhage patient. Rai et al (1987)¹³ found 4.4% incidence of hypertensive disorders of pregnancy in antepartum haemorrhage patients.

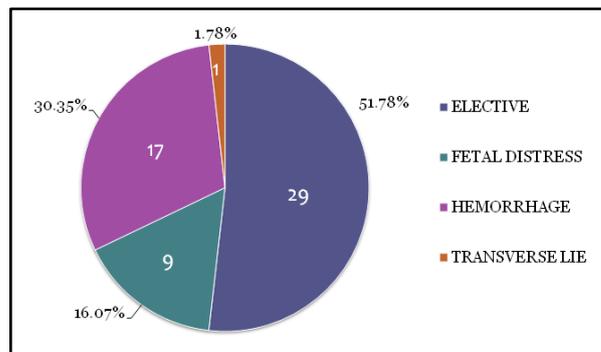
In placenta praevia, 4 patients (6.67%) were delivered vaginally and 56 patients (93.33%) were delivered by caesarean section. The indication for caesarean section was studied according to causes of antepartum haemorrhage. In this study, commonest indication of caesarean section was haemorrhage followed by foetal distress (12 cases).



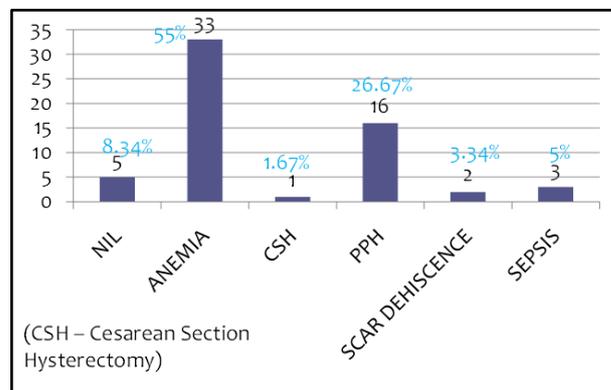
Graph 1. Distribution of Cases as Per Age Group (in Years)



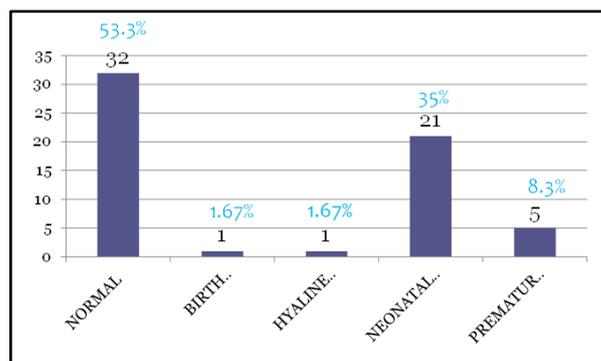
Graph 2. Associated Factors



Graph 3. Indication of Caesarean Section



Graph 4. Maternal Outcome



Graph 5. Perinatal Outcome

DISCUSSION

Chakraborty et al (1993)¹ reported an incidence of 16.25% PPH in cases of antepartum haemorrhage. In placenta praevia group, one patient (2.5%) had placenta accreta who underwent caesarean hysterectomy.

Results of our study are similar to those of Pedowitz³ study.

Two neonates had respiratory distress syndrome. 20 babies of placenta praevia were low birth weight out of 60 babies.

Malpresentation was cause for caesarean section in 1% of antepartum haemorrhage patient. Elective caesarean section was done in a total of 29 patients of placenta praevia. In placenta praevia group, 29 elective LSCS were for major degrees of PP (type IV, III, IIb) and 3 CS were done for CPD in cases of type IIa PP. Cotton et al (1980)⁶ reported haemorrhage as an indication for caesarean section in 70.6% of patients of antepartum haemorrhage in their study.

One of the major aims of proper management of APH cases is to minimise the maternal mortality and morbidity. Anaemia was most common complication in antepartum haemorrhage and was seen in 33 patients of placenta praevia.

Postpartum haemorrhage was the second most common complication in antepartum haemorrhage patients and was seen in 41 cases.

Pedowitz (1965),³ Cotton et al (1980)⁶ and McShane¹⁴ et al reported the incidence of placenta accreta as 4.4%, 4% and 6.32%, respectively. Cotton et al (1980)⁶ found no mortality in cases of placenta praevia in their series.

In a study by Hurd et al (1983),¹⁵ 13.3% cases of APH had PPH.

Out of 60 cases of placenta praevia, 56 patients underwent caesarean section, which suggests that proper monitoring and care is essential to take such patients to a salvageable period.

Previous history of dilatation and curettage and caesarean section were the main causes of placenta praevia, which proves its theory of adherence to scar.

One patient underwent caesarean hysterectomy and only two had scar dehiscence, which proves that proper monitoring and care are essential during this period.

Foetal outcome varies with gestational age though no mortality occurred in our study.

CONCLUSION

From our study, it is concluded that placenta praevia is still the leading cause of maternal and foetal morbidity. Though morbidity can be reduced with modern methods of management, timely diagnosis and intervention is necessary. Most of the patients were unbooked and multiparous, which suggests their careless attitude towards pregnancy and not taking proper antenatal care, which leads to majority undergoing caesarean section with the major causes being previous history of dilatation and curettage and caesarean section.

Routine antenatal check-up, timely caesarean section, liberal blood transfusion, correction of anaemia, wider acceptance of expectant line of management in tertiary centre with availability of blood transfusion and good neonatal intensive care will help further to lower the perinatal and maternal morbidity and mortality.

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