



Placenta Previa: Maternal and Foetal Outcome in a Tertiary Care Hospital of Telangana State

Authors

Dr Jalagam Madhavi¹ and Dr V. Usha Rani^{2*}

¹Assistant Professor, Dept. of Obstetrics & Gynaecology, Kakatiya medical college, Warangal, Telangana State, Email: drmadhavikishore@gmail.com, Mobile: 9866223261

²Associate Professor, Dept. of Obstetrics & Gynaecology, Kakatiya medical college, Warangal, Telangana State

Corresponding Author

Dr. V. Usha Rani

Associate Professor, Dept. of Obstetrics & Gynaecology, Kakatiya medical college, Warangal, Telangana State, India

Abstract

Placenta previa is an increasingly prevalent and potentially dangerous complication of pregnancy. This study was conducted at Government maternity Hospital, Hanamkonda, Telangana state. The no of deliveries conducted during this study period was 7626. In this 322(4.22%) were admitted with APH. In those 68(0.89%) patients were of placenta previa. This study includes 60cases. Mean age was 28.96±10.42 years. Placenta previa was more common 25-35 years age group (77%). About 70% multiparous women had placenta previa compared to 30% primiparous women. The most common gestational age which presented with bleeding was 34-38 week. Twin gestation and previous caesarean sections were of risk factors. Malpresentations was also noticed in 8.8% cases. In our study, 31.6% patients had a history of prior caesarean section. Grading of placenta previa as major (complete and partial) in 63% patients and minor (marginal and low lying) in 37% of people. Bleeding was found in almost all cases these patients were monitored closely as inpatients and more aggressively managed. In 68% of people emergency surgery was done and 16% cases elective surgery were conducted. Severe Anaemia was noticed in 40% cases, blood transfusion was done in 50% of cases in which 20% were antenatal blood transfusion. The post operative complications like Sepsis (6.6%), Febrile morbidity(6.6%), UTI(6.6%) and PPH(13.3%) were recorded. About 25% of neonates require resuscitation, 20% were admitted in NICU, 4 were died after 48 hours. As the maternal and perinatal morbidity and mortality due to placenta previa is preventable, efforts should be made to bring down these rates at tertiary care hospitals.

Keywords: placenta previa, maternal outcome, neonatal outcome, haemorrhage, blood transfusion.

Introduction

Antepartum haemorrhage forms one of the most dangerous and devastating group of disorders in obstetrics. Placenta previa contributes to one of the cases of antepartum haemorrhage. Placenta previa

involves bleeding from placental site completely, which is located in the lower uterine segment either partially or completely and as the lower uterine segment stretches near term or in labour the associated bleeding is inevitable. Maternal and fetal morbidity and mortality from PP are considerable,

and associated with high demands on health care resources^[1,2].

It occurs in 2.8/1000 singleton pregnancies and 3.9/1000 twin pregnancies. The incidence of hysterectomy after caesarean section (CS) for placenta previa is 5.3% (relative risk compared with those undergoing CS without placenta previa in 33)^[3]. Perinatal mortality rates are three or four times higher than in normal pregnancies^[4]

PP is known to be associated with prematurity^[5] However, there is debate about the effect of PP on fetal growth; some studies have suggested that pregnancies with PP are at risk of low birth weight and a low Apgar score.

Painless bleeding is the most characteristics event with placenta previa. Bleeding from a previa usually begins without warning and without pain or contractions in a woman who has had an uneventful prenatal course. Usually it ceases, only to recur.

The majority of cases of placenta previa are diagnosed during routine sonography, a trans-vaginal approach is adequate in revealing the position. Women who present with bleeding in the second half of pregnancy should have a sonographic examination for placental location prior to any attempt to perform a digital examination. Management includes constant observation and monitoring, administration of intravenous fluids, transfusion therapy, assessment of renal function and intravascular status, assessment of the fetus, and delivery.^[6]

Women in whom the distance between the lower placental edge and the internal cervical os was greater than 2 cm could safely have a vaginal delivery. In women with a placenta-internal os distance less than 2 cm, majority required cesarean delivery, usually for bleeding. Studies suggest that women with placenta previa should have a trans-vaginal sonogram in the late third trimester, and those with a placental edge to internal os distance of less than 2 cm should be delivered by cesarean. Women whose placentas are 2cm or more from the os undergo a normal labour.^[7]

The aim of the present study was to evaluate maternal and neonatal outcomes in cases of Placenta

Previa in government maternity hospital, Hanamkonda, Telangana state.

Material and Methods

This study was conducted in the Department of Obstetrics and Gynaecology during the period from January 2017 to December 2017. All antenatal patients of 24 weeks of gestation regardless of their parity. Patients who have diagnosed to have low lying placenta in their mid-trimester scanning will be taken in this study.

Data were collected on patient age, parity, gestational age at time of cesarean section, history of previous cesarean section (s), and degree of PP by ultrasound. The evaluation also included whether cesarean section was done electively or as an emergency, operative time, estimated blood loss during surgery, and units of packed red blood cell (PRBC) transfusion given.

Statistical analysis was done using SPSS version 16.0 for Windows. Data was expressed as frequencies and percentages.

Results

In the present study, analysis of maternal and neonatal outcomes in cases of placenta previa occurring over a period of one year from January 2017 to December 2017 studied at the Government maternity Hospital, Warangal, Telangana state. The no of deliveries conducted during this study period was 7626. In this 322(4.22%) were admitted with APH. In those 68(0.89%) patients were of placenta previa. Eight patients were not included in this study due to different reasons. This includes 60 cases of placenta previa. The parameter like age of patients, gestational age, parity and mode of delivery were shown in table 1.

Table 1: Patients details - age, gestational age, parity and mode of delivery

Parameter	No of patients
Age (years) (mean ± SD)	28.96±10.42
>25	10 (16%)
25-35	46 (77%)
>35	4 (6.6%)
Gestational age (weeks)	
24-30	2 (3.3%)
31-36	19 (31.6%)

>36	39 (65%)
Parity (mean ± SD)	
primi	18 (30%)
Multi	42 (70%)
Twin gestation	2(3.3%)
Previous caesarean section	19(31.6%)
Grade of PP	
Major (complete and partial) (n, %)	38 (63%)
Minor (marginal and low lying) (n, %)	22(37%)
Emergency surgery (n, %)	41(68%)
Elective surgery (n, %)	10(16.6%)
Hospital stay	>5days

Table 2: Antenatal complications

Parameter	No of patients
No. of episodes of bleeding	30-50
Severe anaemia (<7 g%)	24(40%)
Patients in shock	4(6.6%)
blood transfusions	30(50%)
Malpresentation-breech	5(8.3%)
IUD	6(10%)

Table 3: Intra -operative complications

Parameter	No of patients
Haemostatic sutures Cho's	1(1.6%)
Vertical haemostatic sutures B-lynch	1(1.6%)

Table 4: post operative complications

Parameter	No of patients
Sepsis	4(6.6%)
Febrile morbidity	6 (10%)
UTI	4(6.6%)
PPH	8 (13.3%)
Nil	38(63.3%)

Table 5: Neonatal outcome

Parameter	No of patients
No. of neonates requiring no resuscitation	15(25%)
NICU admissions	12(20%)
Expired within 48 hours	4 (6.6%)

Discussion

In placenta previa (PP), the placenta is located over or very near the internal cervical os. Maternal and fetal morbidity and mortality from PP are considerable, and associated with high demands on health care resources. Given the rising incidence of cesarean section combined with increasing maternal age, the number of cases of PP and its complications. In the present study 60 cases of placenta previa were studied regarding the type of clinical presentation, the clinical course, the perinatal and

maternal outcome. In this study incidence of APH was 4.22% and among those 0.89% was placenta previa, almost similar to study conducted by other authors^[8,9]. In the present study 70% multiparous women had placenta previa compared to 30% primiparous women. These studies correlate with the statistic of studies done by others^[10,11] The incidence of twin gestation in the present study was 3.3 %, twin gestations was also reported by others was one of risk factor for placenta previa^[12]. Majority of patients are in the age group 25-35[70%] and the most common gestational age in our study group, which presented with bleeding was 34-38 weeks, similar findings in Tariq et al study showed maximum number of patients with first episodes of bleeding in 34-38 weeks group followed by 30-34 weeks^[11]. Malpresentations in our study is almost similar to the study conducted by others^[13]

In our study, 31.6% patients had a history of prior caesarean section. Our study showed that the risk of placenta previa was more among patients with a previous history of caesarean section, This incidence increased as the number of previous caesarean sections increased.

Grading of placenta previa as Major (complete and partial) in 63% patients and Minor (marginal and low lying) 37% of people. In our study, second trimester bleeding was found in 31.6 % cases and third trimester bleeding was found in 65% cases these patients were monitored closely as inpatients and more aggressively managed.

In our study, 70% cases of placenta previa was delivered by caesarean section. Elective CS at 37 weeks, 68% of cases were emergency LSCS due to recurrent bleeding. Lesser degrees of previa had vaginal delivery and had to be helped out by vacuum extraction. In other studies also less degrees of previa had vaginal deliveries^[14].

Antepartum haemorrhage occurred in 70% of placenta previa cases in our study. Blood transfusion was given for 50% of patients with previa. Of these 20% was antepartum and 30% was in the intrapartum and postpartum period. In Crane JM et al^[15] A relative risk of 9.72 for antepartum transfusion and RR of 7.25 for intra / post-partum

transfusion was seen this was in comparison with our study.

In our study post operative complications like sepsis, febrile illness, UTI and shock When compared with the study done by McShane. This indicates that we must acquire a more appropriate and prompt approach in the management of placenta previa with good antibiotic coverage and better aseptic precaution. Resuscitation required for the neonates in the present study was 25%, whereas in the study done by McShane it was 33%. NICU admissions in the present study done by McShane were 20% and 10% respectively, again indicating the inadequacy in our antenatal and perinatal care^[16].

Perinatal mortality is 6.6% in our study in all birth weight groups when compared to the study done by McShane^[16]. Study conducted by Joan^[17] had maximum perinatal mortality due to RDS, whereas prematurity was the most common cause of perinatal mortality in the present study. A population-based study to investigate risk factors and pregnancy outcome of patients with placenta previa by showed placenta previa was not found as an independent risk factor for perinatal mortality. This may be attributed to the early and timely intervention in the way of elective caesarean sections^[18].

The reported rate of foetal growth restriction/small for gestational age in the literature ranges from 3% to 5%. Therefore, we have no clear evidence to implicate PP as a cause of foetal growth restriction/small for gestational age^[18]. There was no maternal death due to placenta previa but there is prolonged hospital stay.

There is significant association of placenta previa with First trimester and second trimester bleeding, increased blood transfusions, need for caesarean section. Prolonged hospital stays, previous caesarean section, previous dilatation and curettage, placenta accreta, postoperative complications and NICU admission^[19].

Conclusion

The number of deliveries conducted during this study period was 7626. In this 322(4.22%) were

admitted with APH. In those 68(0.89%) patients were of placenta previa. This study includes 60cases. Mean age was 28.96±10.42 years. Placenta previa was more common 25-35 years age group (77%). About 70% multiparous women had placenta previa compared to 30% primiparous women. The most common gestational age which presented with bleeding was 34-38 week.

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