

# Perinatal Morbidity and Mortality in Antepartum Haemorrhage

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## Summary

Antepartum haemorrhage is an important cause for perinatal morbidity and mortality. 112 cases of antepartum haemorrhage were evaluated over a one year period to determine the perinatal outcome. There were 52 cases (46.4%) of placenta previa, 28 cases of abruptio placenta (25%) and 32 cases of unclassified antepartum haemorrhage (28.6%). Abruptio placentae occurred more often after 32 weeks and was a major cause for intrauterine fetal death. Perinatal mortality and severe birth asphyxia were higher in the abruption group when compared to placenta previa. In general, placental abruption carried a higher perinatal mortality and morbidity.

## Introduction

Antepartum haemorrhage is still a grave obstetric emergency contributing to a significant amount of perinatal morbidity and mortality in our country. In pregnancies complicated by bleeding during the second or third trimesters, the rate of preterm delivery and perinatal mortality are at least quadrupled. The present study is an endeavour to find out the perinatal morbidity and mortality in antepartum haemorrhage.

## Materials and Methods

This study was carried out in the Department of Obstetrics and Gynaecology at the Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Pondicherry over a period of one year from 1<sup>st</sup> March 1993 to 28<sup>th</sup> February 1994. All pregnant women with bleeding per vaginum after 28 weeks of pregnancy were included into this study. At the time of admission, a detailed history with relevant general, systemic and obstetric examination was done. Ultrasonography for placental localization and evidence of abruption was

done for all subjects.

Patients were managed according to the diagnosis and followed upto delivery. Apgar scores and birth weights of the newborns were noted at the time of birth and they were followed up throughout the hospital stay. The health of the babies at the time of discharge was noted.

## Observations

The incidence of APH was 2.53% (112 cases) during the study period. The number of cases of placenta previa were 52 (46.4%), abruptio placentae 28(25%) and unclassified APH 32 (28.6%). Sixtytwo percent of patients in this study were unbooked. Fortythree percent of patients were in the 21-25 years age group and the average gravidity was 2.4. Seventyfive percent of patients presented to the hospital more than 4 hours after the episode of bleeding.

Forty percent of patients with placenta previa had their first episode of bleeding before 32 weeks of pregnancy unlike accidental haemorrhage which more

often occurred after 32 weeks of pregnancy. Therefore, when bleeding first occurred, the fetuses were extremely premature (<32 weeks) in those with placenta previa. Foetal malpresentation was 23% in the placenta previa group and 11% in the placental abruption group.

Intrauterine death at the time of admission was observed commonly in abruptio placentae. One hundred and seventeen babies were born to the women in this study (including 5 sets of twins). The Caesarean section rate was 65% in placenta previa and 50% in abruptio placentae groups. It was noted that 58% of babies were preterm, the majority being from the unclassified APH group and placenta previa group. The gestational age of these babies are given in Table 1. Sixtyseven percent of babies were less than 2500 gram in weight and the majority of them were preterm (Table II).

**Table I**  
Gestational Age of Babies (in weeks)

	28-32 wks	33-36 wks	≥ 37 wks
	No. (%)	No. (%)	No. (%)
Placenta previa	13 (25.0)	17 (32.7)	22 (42.3)
Abruptio placentae	9 (32.2)	5 (17.8)	14 (50.0)
Unclassified APH	8 (25.0)	13 (40.7)	11 (34.3)

Perinatal mortality was significantly higher in the group with placental abruption when compared to placenta previa (52% vs 24%) and the Kari Pearson's coefficient was statistically significant ( $P < 0.001$ ). This is illustrated in Table III. Of the surviving infants, 38% had birth asphyxia as shown in Table IV. Morbidity in the newborn was also increased. Thirty eight percent of newborns had asphyxia at birth and 31% needed nursery care. The causes for neonatal morbidity were respiratory distress (11%), hyaline membrane disease (14%), pulmonary haemorrhage, meconium aspiration, jaundice and septicemia.

**Table II**  
Birth Weight of Babies (in gm)

	< 1500 gm	1501 – 2000 gm	2001 – 2500 gm	≥ 2500 gm
	Placenta previa	11	8	16
Abruptio placentae	9	7	3	10 (34.4%)
Unclassified APH	11	4	9	10 (31.2%)

**Table III**  
Perinatal Mortality in APH

	Still Birth	Neonatal death	Perinatal death
	No. (%)	No. (%)	No. (%)
Placenta previa	7 (13.5)	6 (11.5)	13 (25.0)
Abruptio placentae	13 (46.5)	2 (7.0)	15 (53.5)
Unclassified APH	7 (22.0)	2 (6.0)	9 (28.0)

**Table IV**  
Apgar Score at birth

	Apgar Score		
	7-10 No. (%)	4-6 No. (%)	≤3 No. (%)
Placenta previa	28 (58)	9 (19)	11 (23)
Abruptio placentae	9 (60)	-	6 (40)
Unclassified APH	19 (70)	6 (22)	2 (8)

## Discussion

The incidence of antepartum haemorrhage in the present study (2.5%) is comparable to that reported by Menon in 1961 (2.7%) and by Hibbard and Jeffcoate in 1966 (3.79%). Rao and Manorama (1975) found that most patients took more than 4 hours to reach the hospital and this was also found in our study.

Sixty seven percent of babies in our study were of low birth weight compared to 73% as reported by Hibbard and Jeffcoate (1966) and 66% by Khosla et al (1989). The incidence of prematurity in placenta previa, varies in different series depending upon the effectiveness of expectant management. Preterm babies in our series were 58% which is comparable to the study by Pinto and Prabhu in 1971 (56%).

The percentage of babies with birth asphyxia was 38% in this study and is comparable to that noted by William et al in 1978 (38%). The perinatal mortality rate of 25% in the placenta previa group is higher when compared to that of Bhide et al in 1990 (10%). This could be because of 8 cases of major degree placenta previa, 5 cases of IUD and 3 cases of extremely premature babies in our study. The higher perinatal mortality in the abruption group (53.5%) was due to higher incidence of

intrauterine death at the time of admission and was comparable to the figures reported by Hibbard and Jeffcoate in 1966 (50%), Bhide et al in 1990 (54%) and Das in 1975 (51%).

### Conclusion

Placental abruption appeared to carry a poor prognosis for the fetus and neonate when compared to placenta previa. Educating the pregnant mother about the importance of antenatal care and easy accessibility to quality antenatal services would go a long way in bringing down the perinatal morbidity and mortality associated with antepartum haemorrhage.

### References

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