

## A Study of Fetomaternal Outcome in Placenta Previa

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### Abstract

**Background:** Prevalence of Placenta previa is found to vary between 0.5% of all pregnancies. Placenta previa is one of the major causes of antepartum hemorrhage and is also important cause of maternal and perinatal morbidity and mortality in India.

**Methods:** This is a prospective study conducted in the department of Obstetrics & Gynaecology, Govt. Medical College, Kota from Dec-2020 to Nov-2021 on cases of placenta previa diagnosed by clinical or ultrasonography were included in the study. All case records were obtained from medical record section. Informed consent was taken from all the patients. Detailed history was taken including age, gestational age, history of still birth or pregnancy loss, family history of diabetes, past history of diabetes, obstetric history.

**Results:** Low lying placenta was the most common type of placenta previa in 42.00% cases. Out of 100 cases 16.00% cases had PPH (postpartum hemorrhage). 30.00% baby birth weight was <2.0 kg.

**Conclusions:** Managing a case of placenta previa during pregnancy poses a great challenge to every obstetrician in present day obstetrics due its increased risk of maternal and perinatal complications.

**Keywords:** Placenta Previa, Postpartum Hemorrhage, Antepartum Hemorrhage.

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### Introduction

Placenta Previa (PP) is defined as placenta that lies wholly or partly within the lower uterine segment. The prevalence of clinically significant PP is estimated to be approximately 0.5-1 % of amongst hospital deliveries. It is responsible for one-third of all cases of antepartum hemorrhage and

around 35% of cases of placental bleeding. With the rising incidence of cesarean sections(CS) combined with increasing maternal age, the number of cases of PP and its complications, including placenta accreta is likely to continue [1,2].

Placenta l bed is the commonest Site of third trimester hemorrhage, in a few cases bleeding is from local causes in the genital tract, whereas in a substantial remainder the bleeding has no obvious cause but it is probably still from placental bed. Maternal and fetal morbidity and mortality from placenta previa and placenta previaaccreta are considerable and are associated with high demands on health resources. With the rising incidence of caesarean sections combined with increasing maternal age, the number of cases of placenta previa and its complications, including placenta accreta, will continue to increase. Defective decidual vascularization, possible result of inflammatory or atrophic changes is one of the factors in the development of PP. Abnormal placentation such as placenta Accreta, Increta and Percreta are often associated with combination of PP, particularly with the combination of previous CS. In PP the most common symptom is painless vaginal bleeding. The first hemorrhage is usually not severe the “warning hemorrhage”, occasionally it is severe one [3-5].

Placenta previa is one of the major causes for maternal and perinatal mortality accounting for 35% cases of antepartum haemorrhage. This study is conducted to know the various clinical presentations and fetomaternal outcome in cases of placenta previa.

## Methods

This is a prospective study conducted in the department of Obstetrics & Gynaecology for a period of one years. All cases of placenta previa diagnosed by clinical or ultrasonography were included in the study. All case records were obtained from medical record section.

### Inclusion criteria

- All cases of placenta previa diagnosed by clinical and ultrasonography admitted during the study period.
- Gestational age >28 weeks.

### Exclusion criteria

- Gestational age <28 weeks.
- Other causes of antepartum hemorrhage.

**Data analysis-** The data were entered in Microsoft Excel worksheets and analyzed. Categorical variables are expressed as the number of patients and the percentage of patients;

continuous variables are expressed as mean and standard deviation. An alpha level of 5% has been considered, i.e. if any p-value is less than 0.05, it has been considered as significant. SPSS version 20 has been used for the analysis.

## Results

**Table 1: Socio-demographic profile**

|                            |                 |
|----------------------------|-----------------|
| Age                        | 24.36 ±6.02 yrs |
| Parity (primi: multi para) | 25:75           |

Majority of cases belong to 21-25 age group. In placenta previa was found in 75.00%cases in multipara.

**Table 2: Type of placenta previaWise Distribution**

| Type of placenta | No. of Case | Percentage |
|------------------|-------------|------------|
| Low lying        | 42          | 42.00      |
| Marginal         | 28          | 28.00      |
| Incomplete       | 13          | 13.00      |
| Complete         | 17          | 17.00      |
| <b>Total</b>     | <b>100</b>  | <b>100</b> |

Low lying placenta was the most common type of placenta previa in 42.00% cases.

**Table 3: Type of delivery-wise Distribution**

| Type of delivery | No. of Case | Percentage |
|------------------|-------------|------------|
| LSCS             | 61          | 61.00      |
| Normal delivery  | 39          | 39.00      |
| <b>Total</b>     | <b>100</b>  | <b>100</b> |

Majority of cases (61.00%) deliver by LSCS.

**Table 4: Birth weight Wise Distribution**

| Birth weight (Kg) | No. of Case | Percentage |
|-------------------|-------------|------------|
| <2.0              | 30          | 30.00      |
| 2.0-25            | 19          | 19.00      |
| 2.5-30            | 31          | 31.00      |
| >3.0              | 19          | 19.00      |
| <b>Total</b>      | <b>100</b>  | <b>100</b> |

Out of 100 cases, 30 cases were of birth weight <2.0 kg.

**Table 5: incidence of maternal complication**

| Maternal complication | No. of Case | Percentage |
|-----------------------|-------------|------------|
| PPH                   | 16          | 16.00      |
| Hysterectomy          | 1           | 1.00       |
| Hemorrhagic shock     | 7           | 7.00       |

Out of 100 cases 16.00% cases had PPH.

### Discussion

Pregnancy having placenta previa is most dangerous condition because it is associated with adverse maternal and perinatal outcome. The majority of the cases seen in age group of 21-25 years that is 75.00% of total cases which is comparable to study of Bhatt AD et al. Highest incidence of placenta previa seen in multiparous group. In this study 75.00% cases of previa seen in multiparous patients which is comparable with study of Bhatt AD et al.

The major cause of mortality and morbidity in placenta previa are hemorrhage both antepartum and postpartum. In the present study 16.00% patient developed postpartum hemorrhage in which 6.00% cases required hemostatic sutures over uterus and 1.00% cases undergone hysterectomy. In the present study 7.00% patient developed hypovolemic shock and required blood transfusion which is comparable with study of Bhatt AD and C, kaseem et al. [6-9]

### Conclusion

Managing a case of placenta previa during pregnancy poses a great challenge to every obstetrician in present day obstetrics due its increased risk of maternal and perinatal complication. Thus good antenatal care including more frequent antenatal check-ups, correction of anemia during antenatal period, anticipating the complications in consultation with senior obstetrician, educating the patient's regarding the complications like prematurity, need for blood transfusions and its products and rarely hysterectomy and taking the paediatrician help will definitely reduce the perinatal complications associated with it.

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