

Placenta Praevia- A Study On Maternal & Perinatal outcome

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Abstract

Objective: To determine the maternal & perinatal outcome in placenta praevia

Method: It is a cross-sectional study carried out in a tertiary care hospital. All pregnant women who were diagnosed to have placenta praevia were included.

Introduction: Placenta praevia describes placental implantation in the lower uterine segment either over or near the cervical os. Various risk factors are high parity, advanced maternal age, previous caesarean scar or any other scar in uterus, prior curettage and placental size.

Results: out of total 6873 deliveries, Placenta Praevia is observed in 19 cases (0.276%). 97% are unbooked & 75% are between 20-25 yrs. 89.4% multiparous women with majority of gestational age between 28-32 wks (52.6%), h/o prior caesarean section in 42%, 31% had prior curettage. 21% had central praevia 26.3% cases are complicated by placenta increta –percreta syndrome. PPH is seen in 89%, needed blood transfusion, uterine artery & internal iliac artery ligation, peripartum hysterectomy is done in 15.87%. In terms of perinatal outcome of patients presenting with placenta praevia 26.3% severe enough to cause intra uterine fetal demise, APGAR < 7 in 36.8% & 47.3% neonatal deaths.

Conclusion: Placenta praevia had adverse maternal and foetal outcome. Early detection and strengthening of safe motherhood services particularly in rural areas, will help reduce the gravity of the situation.

Key Words: Blood transfusion, Haemorrhage, Placenta Praevia

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I. Introduction

Placenta Praevia is characterized by an abnormally situated placenta overlying the os and is associated with adverse maternal, fetal and neonatal complications in obstetrics. (1). Women with placenta praevia are at an increased risk of third trimester bleeding. (2) It is associated with many complications like postpartum Haemorrhage, peripartum hysterectomy, blood transfusions, urinary tract injuries, placenta accreta for mother and prematurity, fetal distress, intrauterine growth restriction and increased neonatal mortality rates for the fetus (3). Pathophysiology of this condition is uncertain. There appears to be an association between endometrial damage and uterine scarring and subsequent placenta praevia. (4).

II. Materials and methods

It's a cross sectional study carried out in a tertiary care hospital. All pregnant women who attended the hospital for delivery and who were diagnosed to have placenta praevia on ultrasound were included in the study. Informed consent was taken from all the patients and following data was collected and results were analyzed.

2.1 Maternal Factors

1. Age
2. Parity
3. Gestational age at the time of presentation & delivery
4. History of prior curettage, MTP, spontaneous abortion
5. H/o prior caesarean section
6. Degree of placenta praevia by ultrasound
7. Placenta accreta, increta or percreta diagnosed by USG or MRI
8. Mode of delivery

2.2 Intra operative complications

1. Estimated blood loss
2. Number of blood transfusions needed
3. Urinary tract injuries
4. Medical management to control PPH
5. Step wise devascularization procedures
6. Peripartum hysterectomy

2.3 Fetal Factors

1. Gestational age
2. Birth weight
3. Intrauterine fetal death
4. APGAR score at 1 & 5 min
5. Admission to neonatal intensive care unit
6. Neonatal death

III. Results

1. Incidence of Placenta Praevia in the present study - 0.276%
2. 73.68% were unbooked cases

Table –1: Age distribution of patients

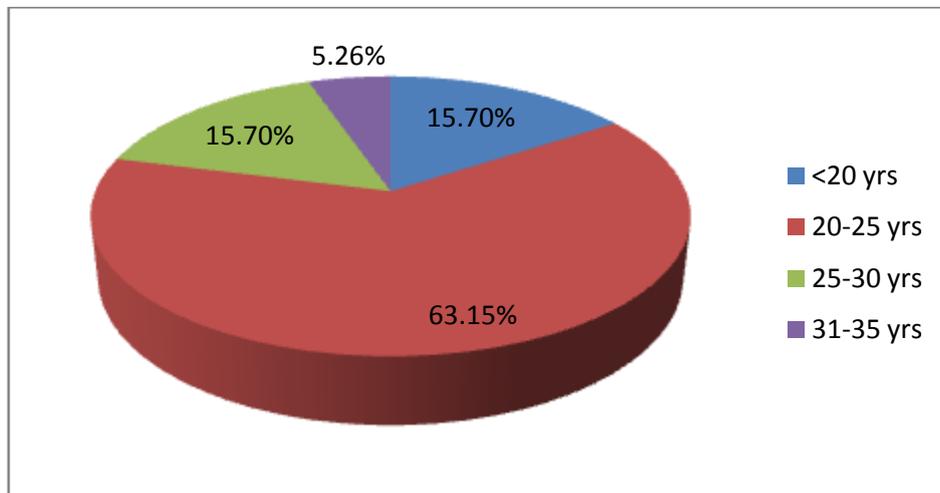


Table – 2: Maternal risk factors

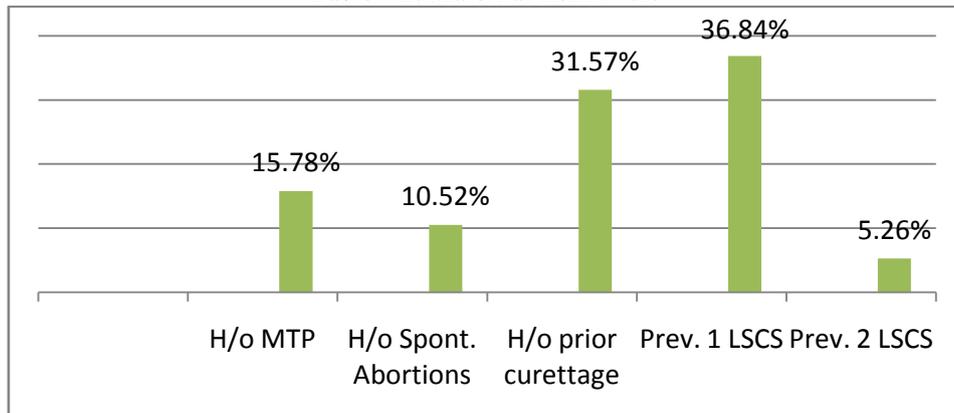


Table – 3: Gestational age at the time of presentation & delivery

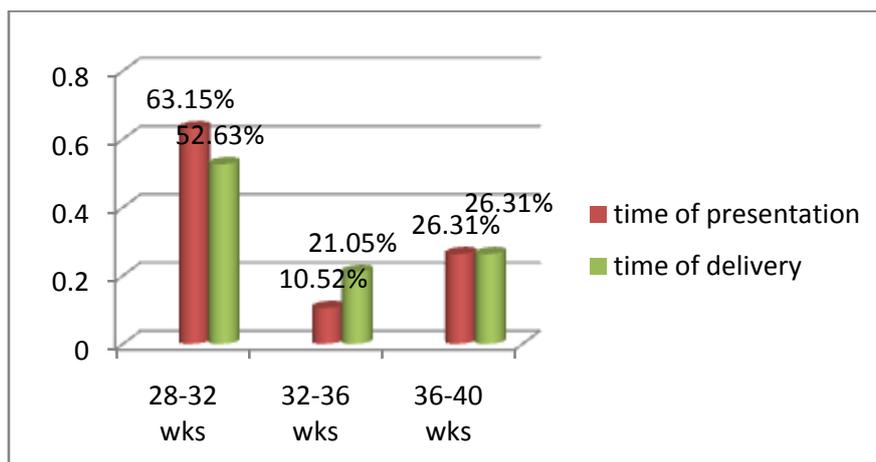


Table – 4: Type of placenta previa

Type of placenta previa	No.of Patients	Percentage
Type I		
Type II a	2	10.52%
Type IIb	5	26.31%
Type III	7	36.84%
Type IV	5	26.31%

Table – 5: Maternal complications

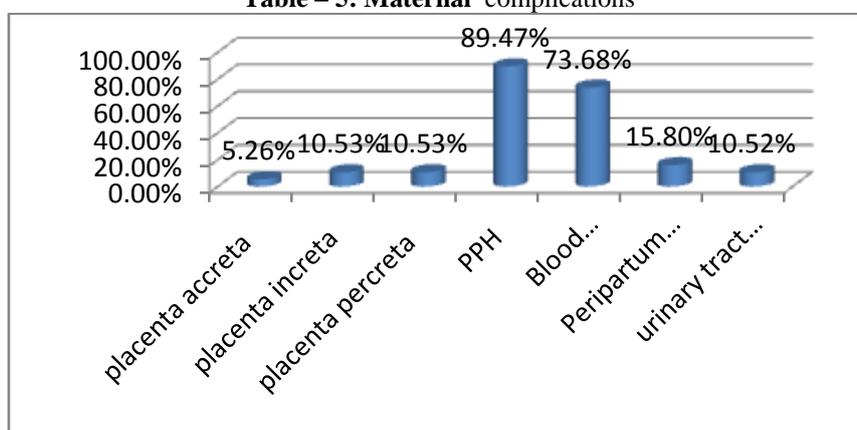


Table -6 :Perinatal Outcome

Fetal factor	Number	Percentage
IUFD	5	26.3%
APGAR < 7	7	36.8%
NICU death	8	47.3%
Live	6	31.57%

IV. Discussion

Placenta praevia remains as one of the major cause of obstetrical haemorrhage contributing about 0.276% in the present study. The overall incidence of placenta praevia in various western studies were between 0.2-0.5% which is concurrent with our observations.(5,6). Incidence of placenta praevia increases with maternal age. In the present study the mean age is 22.67 +/- 4.03 years. In the present study most of the women were (63.15%) of 21-25 yr. group. Next major group was that of <20yrs and 26-30 years.(15.7%). Mustafa S.B. et al reported similar results with 51.7% in their study group belonging to 20-29 yrs group.(7).52.63% of the patients in the present study presented at gestational age between 28-32 weeks. WilsonRoddie et al reported that 78.3% of their group presented with first haemorrhage between 34 weeks and term(8).In our study, 63% of women had major type of praevia and this might be the reason for haemorrhage in early gestation. 31% had a history of prior curettage& 26% had previous h/o spontaneous abortions&MTP 42.10% had previous LSCS. Mustafa et al reported previous scar of uterus as the major risk factor (56.5%) in their study.(7)26.31% were managed conservatively & delivered at 36 wks.26.3% were complicated by placenta accreta syndromes. Incidence:

0.727/1000 deliveries(present study)1.876/1000 deliveries(American college of obstetrics and gynaecologists, 2014)(9).Blood transfusions of more than 3 units was required in 73.68%.Wilson Roddie et al reported blood transfusion requirement in only 19.13%(8).Caesarean hysterectomy was done in 3 cases (15.8%) and all the 3 cases had a history of prior caesarean section. WilsonRoddie et al reported caesarean hysterectomy in 7.86% of cases. (8)Urinary bladder injury and repair was needed in 10.52 %. In terms of perinatal outcome, 26.3% of patients had bleeding severe enough to cause intrauterine fetal demise. Preterm delivery constitutes the major cause of perinatal death (52.63% - <28-32 wks),40.86% had preterm delivery in Wilson Rodie et al study.(8).47.36% hadB.wt<2kgs & APGAR<7 in 36.8%,(Wilson Rodie et al 5.69%) NICU admission was required in 47.3%Wilson Rodie et al reported admission in 15.65% cases (8).

V. Conclusion

Frequency of caesarean section is increasing worldwide with a parallel rise in maternal mortality and morbidity and strongly associated with greater incidence of placenta praevia. Incidence of adherent placenta has increased dramatically over the last 3 decades with the increased caesarean delivery rate. Placenta accreta syndrome should be excluded in every case of placenta previa especially in those with risk factors. Early detection of cases & strengthening of safe motherhood practices in our country particularly in rural areas will help to reduce the gravity of the situation

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