

Frequency of Placenta Previa – Placenta Accreta in Patients with Previous Cesarean Section

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Abstract

Objective: To study the frequency of placenta previa/accreta in patients with previous cesarean section.

Study Design: Prospective hospital based study.

Place and Duration of Study: Gyne unit 2 Nishtar Hospital Multan from November 2010 to September 2011.

Patients and Methods: The study included patients admitted with the suspicion of placenta previa through the out patient department in the ward and in the labor room as emergency cases with antepartum hemorrhage. Diagnosis was confirmed by transabdominal ultrasound and in patients with anterior placenta previa and previous cesarean section, doppler ultrasound was requested to diagnose placenta accreta. Detailed history, clinical examination and baseline investigation was done in all patients.

Results: During the study period 38 cases of major degree placenta previa were managed. 22 (57.89%) were emergency admissions and 16 (42.10%) were admitted throughout patient department. 29 (76.39%) patients had previous cesarean section and 9 (23.68%)

patients had all previous vaginal deliveries. 8 (27.58%) patients had previous one cesarean section and 21 (72.41%) had 2 or more cesarean sections, 4 (10.52%) patients had placenta accreta and out of these 3 patients were diagnosed antenatally by doppler ultrasound and one patient was diagnosed at emergency cesarean section.

Conclusion: The major risk factor for the placenta previa is uterine scarring and therefore the incidence is increasing with increasing cesarean section rate. Placenta accreta is one of the most serious complications of placenta previa. It is suggested that in patients with anterior major degree placenta previa and previous cesarean section, antenatal diagnosis of placenta accreta should be made by doppler ultrasound so that appropriate management plan can be made.

Keywords: Placenta previa, placenta accreta, cesarean section.

Introduction

Placenta previa is a significant clinical problem as patients are at the risk of massive hemorrhage and pre-term delivery.¹ The major risk factor is uterine scarring and thus the incidence is increased with the increasing cesarean section rate. One cesarean section increases the risk by 0.65% and four or more increases risk by 10%.² Placenta accreta is a potentially life threatening obstetric complication associated with massive postpartum hemorrhage and has become one of the most common indications for emergency peripartum hysterectomy.³⁻⁵ Diagnosis of placenta accreta is made

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antenatally in increasing number of patients but still many or diagnosed in the 3rd stage.⁶ We conducted a study to see the frequency of placenta previa / accreta in patients with previous cesarean section as it is now increasingly seen in our obstetric patients due to increased cesarean section rate.

Patients and Methods

The study included patients admitted with the suspicion of placenta previa through the outpatient department in the ward and in the labor room as emergency cases with antepartum hemorrhage. Diagnosis was confirmed by transabdominal ultrasound and in patients with anterior placenta previa and previous cesarean section, doppler ultrasound was requested to diagnose placenta accreta. Detailed history, clinical examination and base line investigation was done in all patients.

Results

During the study period 38 cases of major degree placenta previa were managed. 22 (57.89%) were emergency admissions and 16 (42.10%) were admitted through outpatient department. In our study majority of patients were between 25 and 38 years of age (Table 1) 29 (76.39%) patients had previous cesarean

Table 1: Age – wise Distribution of Patients with placenta previa (n = 38).

Age (in years)	No. of Patients	Percentage (%)
20 – 25	8	21.05
25 – 38	23	60.52
> 38	7	18.42

Table 2: No. of cesarean deliveries in patients with placenta previa (n = 29).

Age (in years)	No. of Patients	Percentage (%)
Previous 1	8	27.58
Previous 2	11	37.93
Previous 3	6	20.68
Previous 4	4	13.79

section and 9 (23.68%) patients had all previous vaginal deliveries. Eight (27.58%) patients had previous one cesarean section and 21 (72.41%) patients had 2 or more cesarean sections (Table 2). 4 (10.52%) patients had placenta accreta and out of these 3 patients were diagnosed antenatally by doppler ultrasound and one patient was diagnosed at emergency cesarean section.

Discussion

The exact cause of placenta previa is not yet known but various associations have been identified such as older age, multiparity, previous cesarean section, uterine curettage and chronic hypertension.¹ Placenta accreta develops when placental implantation is abnormal and the most common setting is placenta previa after prior caesarean delivery. The risk of placenta accreta increases progressively in correlation with the number of repeat caesarean deliveries.^{7,8} In our study out of 38 patients of placenta previa, 29 patients had previous cesarean deliveries and 4 patients had placenta accreta. Placenta accreta is one of the most serious complications of placenta previa. The reported incidence of placenta accreta varies because of difference in diagnostic criteria, whether the diagnosis is based on clinical findings only or together with histological criteria.⁹ The highest incidence 0.9% was reported in a recent study based on clinical diagnostic criteria showing that uterine scarring was a major risk factor.¹⁰ The higher incidence of placenta accreta, 10.52% in our study is probably because Nishtar hospital is a tertiary referral centre and the diagnosis was based on clinical or doppler ultrasound findings and was not confirmed by histology. Characteristics ultrasound findings can make an early prenatal diagnosis of placenta accreta whenever suspected or in the presence of risk factors.¹¹ MRI can be a useful diagnostic tool in case of inconclusive findings.¹² Prenatal diagnosis of placenta accreta is critical to obstetric outcome by making arrangements for elective cesarean section, possible hysterectomy and need for transfusion of blood products.¹³

Conclusion

The major risk factor for the placenta previa is uterine scarring and therefore the incidence is increasing with increasing cesarean section rate. Placenta accreta is one of the most serious complications of placenta previa. It is suggested that in patients with anterior major degree placenta previa and previous cesarean section,

antenatal diagnosis of placenta accreta should be made by doppler ultrasound so that appropriate management plan can be made.

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