



## PLACENTA PREVIA ACCRETA;

COMPARISON OF OUTCOME OF ANTENATAL DIAGNOSED CASES IN PREVIOUS CAESAREAN SCAR WITH UNDIAGNOSED CASES OF PLACENTA PREVIA ACCRETA IN PREVIOUS CAESAREAN SCAR

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**ABSTRACT ... Objective:** To compare outcome of antenatal diagnosed cases of placenta previa accreta in previous caesarean scar with undiagnosed cases of placenta previa accreta in previous caesarean scar. **Study Design:** Cohort Study. **Setting:** The study was carried out in department of Obstetrics and Gynecology Nishtar Hospital Multan. **Population:** **Method:** Total 206 cases were included in the study divided into two groups. **Group A** had 103 antenatal diagnosed cases of placenta previa accreta in previous caesarean scar and **Group B** comprised 103 cases un-diagnosed having placenta previa accreta in previous caesarean scar. **Outcome Measure:** Outcome was determined in terms of morbidity (i.e Hysterectomy) and mortality. **Results:** It was found that hysterectomy was performed in 47 (45.6 %) vs 36 (35 %) diagnosed and un-diagnosed cases respectively. 9 (8.7%) vs 2(1.9%) cases died in diagnosed and undiagnosed Cases respectively. **Conclusions:** No significant difference in term of morbidity was found between diagnosed and un- diagnosed cases of placenta previa accreta in previous caesarean scar. Mortality was high in diagnosed cases of placenta previa accreta in previous caesarean scar.

**Key words:** Placenta previa, Transvaginal sonography (TVS),

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### INTRODUCTION

Placenta previa means placenta is inserted partially or entirely into the lower uterine segment<sup>1</sup>. It is associated with significant maternal and fetal morbidity and mortality because of anticipated blood loss and is one of the most acute life threatening emergencies in obstetrics<sup>2</sup>.

Placenta previa and its complications are increasing because of rising rate of caesarean section and increasing maternal age<sup>3</sup>.

Incidence of placenta previa is 0.5-1% in all pregnancies<sup>4</sup>. There is increased risk of neonatal mortality about 14%<sup>5</sup>.

The types of adherent placenta are accreta, increta and percreta.

Placenta that invades the myometrium is termed as placenta accreta and its incidence is 1 in 2500 deliveries and with placenta previa it is 10%<sup>6</sup>. It is associated with massive obstetric hemorrhage

with significant maternal and fetal morbidity and mortality<sup>7</sup>. Placenta accreta has emerged as the major indication for peripartum hysterectomy accounting for 50%. The mortality rate of undiagnosed and diagnosed cases is 1% and 4% respectively<sup>8,9</sup>.

Antenatal diagnosis of placenta accreta is important because it reduces fetal and maternal morbidity<sup>10</sup>. Transvaginal sonography (TVS) is the most accurate method for localizing and diagnosing placenta previa.

Doppler ultrasonography should be performed in women with placenta previa who are at increased risk of placenta accreta<sup>3</sup>. When placenta accreta is diagnosed prior to delivery then care in a tertiary care hospital with high dependency unit with adequate arrangements of cross matched blood, prior counselling of the couple for hysterectomy must be considered to improve the management of this patient<sup>3,10</sup>.

Nishtar Hospital Multan is a tertiary care health center providing health facilities to a large population of Southern Punjab. Uptill now, there is no proper well documented study conducted to compare the morbidity and mortality in between diagnosed and undiagnosed cases of placenta accreta in previous scar. Proposed study would generate useful database on this subject and subsequently this would help to reduce maternal morbidity and mortality associated with this condition.

## METHODOLOGY

The study was undertaken among multigravidas aged more than 35 with history of previous caesarean scar. Patients who were not included were those having previous vaginal deliveries, with chornic illnesses like diabetes and hypertension and those having bleeding disorders.

Total 206 patients included in the study. Group A comprised 103 patients, selected from ward who were diagnosed to have placenta previa accreta on colour Doppler. Group B comprised 103 patients, selected from labour room presented with antepartum hemorrhage. They were not diagnosed pre-operatively to have placenta previa accreta. Both gourps were informed about the suspected diagnosis and potential obligations (Hemorrhage, blood transfusion, caesarean hysterectomy). Delivery was scheduled at b/w 37-38 weeks in group A. But emergency caesarean section were performed, if women went into preterm labour or developed vaginal bleeding.

4 units of packed red blood cells and 10 fresh frozen plasma were arranged for the delivery. Delivery was performed in labour ward by the senior consultant.

When patients had massive hemorrhage (blood loss > 1000ml) and bleeding could not be controlled then caesarean hysterectomy was performed.

## Data analysis

The collected information was entered into SPSS version-10 and analyzed.

## RESULTS

In present study, there were 103 antenatal diagnosed cases of placenta previa accreta in previous caesarean scar and another 103 cases of women (undiagnosed) having placenta previa accreta.

There were 50(48.5%) vs. 38(36.9%) women between 30-35 years in diagnosed and undiagnosed cases respectively.

There were 50(48.5%) vs. 59(57.3%) women between 36-40 years in diagnosed and undiagnosed cases respectively. While 3(3.0%) vs. 6(5.8%) women were 41-45 year in diagnosed and undiagnosed cases respectively. (Table no. I)

Regarding parity, 88(85.4%) vs. 85(82.5%) cases were para 0-4 in diagnosed and undiagnosed cases respectively while 15 (14.6%) vs. 18(17%) cases were para 5 and above in antenatal diagnosed and undiagnosed cases respectively ( table No. I).

Gestational age was <37 in 87(84.5%) vs. 92(89.3%) weeks in diagnosed and undiagnosed cases respectively while 37 and above in 16(15.5%) vs. 11(10.7) cases in diagnosed and undiagnosed cases respectively (table no. I).

Regarding morbidity, hysterectomy was performed in 47(45.6%) vs. 36(35.0%) diagnosed and undiagnosed cases respectively (table no. II)

Regarding mortality, 9(8.7%) vs. 2(1.9%) cases died in diagnosed and undiagnosed cases respectively (table no. III).

When we compared the morbidity (i.e hysterectomy) in diagnosed and undiagnosed cases of placenta previa accrete in previous caesarean scar, no significant difference was found ( $p=0.119$ ). Regarding the mortality it was significantly high in diagnosed cases of placenta previa accrete in previous caesarean scar ( $p=0.03$ ).

		Diagnosed Cases	Undiagnosed cases
AGE	30-35	50(48.5%)	38 (36.9%)
	36-40	50(48.5%)	59 (57.3%)
	41-45	3(3%)	6 (5.8%)
PARITY	0-4	88 (85.4%)	85 (82.5%)
	5 and above	15 (14.6%)	18 (17.5%)
GESTATIONAL AGE	< 37	87 (84.5%)	92 (89.3%)
	37 and above	16 (15.5%)	11 (10.7%)

Table-I.

HYSTERECTOMY	DIAGNOSED CASES	UNDIAGNOSED CASES
YES	47 (45.6%)	36 (35.0%)
NO	56 (54.4%)	67 (65.0%)
TOTAL	103 (100%)	103 (100%)

Table-II. Morbidity in patients with placenta previa &amp; accreta

HYSTERECTOMY	DIAGNOSED CASES	UNDIAGNOSED CASES
YES	9 (8.7%)	2 (1.9%)
NO	94 (91.3%)	101 (98.1%)
TOTAL	103 (100%)	103 (100%)

Table-III. Mortality in patients with placenta previa &amp; accreta

## DISCUSSION

In this study morbidity (hysterectomy) in diagnosed cases was 45.6% and in undiagnosed cases it was 35.0%. While mortality was 8.7% vs. 1.9% in diagnosed and undiagnosed cases respectively. There is a variation in figures in international and national literature regarding the outcome.

A prospective, observational study at 13 academic medical centers reported leading indication for hysterectomy was placenta accreta (38%) in diagnosed cases. There were three maternal deaths (1.6%) in all hysterectomies (186 cases)<sup>11</sup>.

Vazquez JA et al<sup>12</sup> has found that peripartum hysterectomy has been reported 33% for undiagnosed placenta accreta.

In one study,<sup>13</sup> there were 15 undiagnosed cases

of placenta accreta. Caesarean hysterectomy was performed in 11 cases (91.7%).

In one report, one-third of patients (35%) with known placenta accreta required emergent delivery<sup>14</sup>.

The incidence of placenta accreta should increase steadily over the next century as the number of caesarean section and maternal age at delivery increase. There is a need for reliable antenatal diagnosis since placenta accreta encountered unexpectedly can lead to catastrophic blood loss, multiple complications such as adult respiratory distress syndrome, Sheehan's syndrome, renal failure, and even death. If these pregnancies can be identified before delivery, the site and time of delivery, as well as the surgical approach can be planned ahead and blood loss minimized.

## CONCLUSIONS

Morbidity (hysterectomy) in diagnosed and undiagnosed cases of placenta previa accreta in previous caesarean scar seems to have no difference. Mortality was significantly high in diagnosed cases of placenta previa accreta in previous caesarean scar.

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Trust takes years TO BUILD,  
seconds TO BREAK,  
and forever TO REPAIR

Unknown

