

Title: **FETOMATERNAL OUTCOMES IN CASES OF PLACENTA PREVIA SCARRED VERSUS UNSCARRED UTERUS**



Introduction

Placenta previa complicates 0.3–0.5% of all pregnancies and is a major cause of third-trimester hemorrhage which is on the rise due to rise in incidence of cesarean sections. [1]Significant maternal morbidity in form of increased incidence of fetal malpresentation, cesarean delivery, increased blood loss, and peripartum hysterectomy have been noted in cases of placenta previa and can lead to prolonged hospitalization in these women. Premature deliveries can occur which lead to higher admission to neonatal intensive care unit and stillbirths.

Objectives

To study the maternal and fetal outcomes in cases of placenta previa in scarred and unscarred uterus.

Materials and Methods

Study Design: Observational Cross Sectional Study
Study Setting: Department of Gynaecology and Obstetrics, Calcutta National Medical College and Hospital (CNMCH)
Study Period: January 2024 to June 2024
Study population: All pregnant mothers with placenta previa in third trimester.
Sample size: 40 mothers fulfilling the inclusion and exclusion criteria within the study period.
Inclusion criteria: All pregnant women with placenta previa and singleton pregnancy beyond 28 weeks of gestation
Exclusion criteria: Pregnant women with POG less than 28 weeks, or those with co-existing morbidity; severe PIH, Gestational Diabetes Mellitus, DIC, coagulation disorder and those who do not give consent for the study.

Results

In this study, out of 40 pregnant mothers, 21 belonged to scarred uterus and 19 belonged to unscarred uterus with 51% booked cases in unscarred group and 48% in scarred uterus group. There were 2 maternal deaths during the period of study both of which belonged to the scarred uterus category

Table 1: Demographic, Obstetric characteristics and maternal outcomes of the study population (n=40)					
Uterus		Scarred	Non Scarred	χ2	P-value
Variable					
Age of Mother (y)		30.1±4.49	27.3±6.32	1.67 [#]	0.102
Period of Gestation (weeks)		34.1±3.10	34.8±2.91	-0.784 [#]	0.438
Malpresentation	Yes	5 (62.5%)	3 (37.5%)	0.401	0.527
	No	16 (50%)	16 (50%)		
Type of Anesthesia	GA	17 (77.3%)	5 (22.7%)	12.031	0.001*
	Spinal	4 (22.2%)	14 (77.8%)		
Unhealthy Wound	Yes	3 (50%)	3 (50%)	0.000	1.000
	No	16 (50%)	16 (50%)		
ICU Admission	Yes	17 (70.8%)	7 (29.2%)	8.807	0.004*
	No	4 (25%)	12 (75%)		
Hysterectomy	Yes	6 (75%)	2 (25%)	2.030	0.154
	No	15 (46.9%)	17 (53.1%)		
Bladder Injury	Yes	1 (50%)	1 (50%)	0.005	0.942
	No	20 (52.6%)	18 (47.4%)		
Mean Hospital Stay (days)		11.3±5.07	9.1±2.08	1.759 [#]	0.087
Blood Products received (U)		4.6±2.50	3.1±2.26	1.938 [#]	0.060

**Statistically significant; #t-test value*

Figure 1: Bar diagram showing fetal weight in women with scarred uterus versus those with non scarred uterus (n=40)

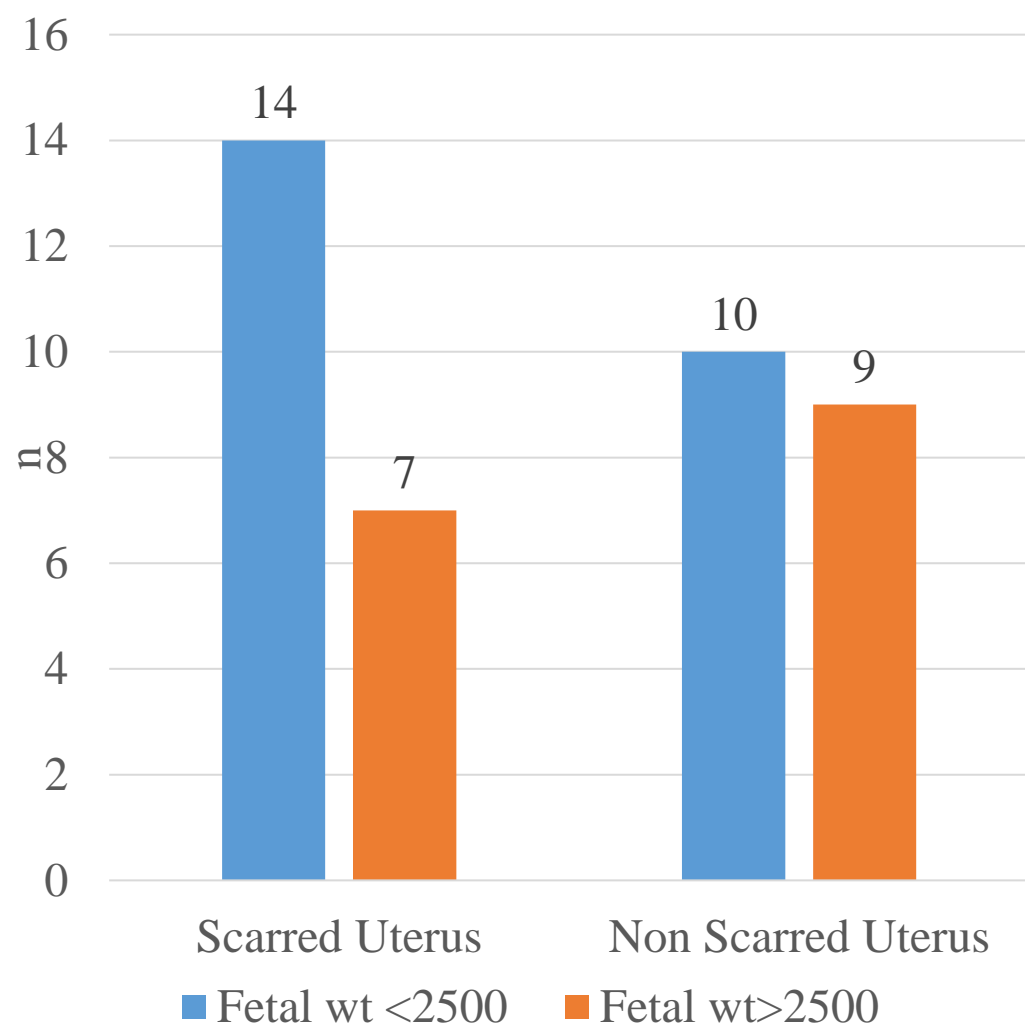
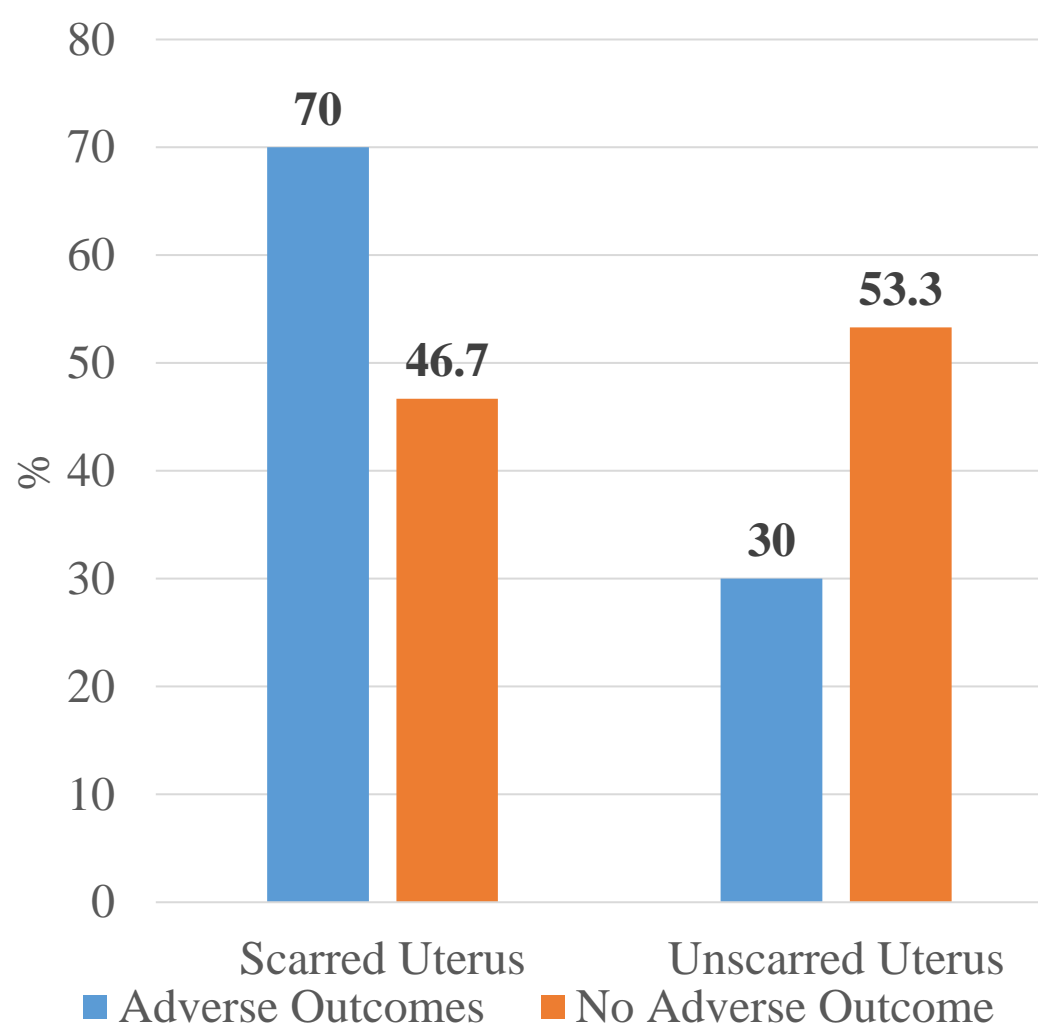


Figure 2: Bar diagram showing fetal outcome in women with scarred uterus versus those with non scarred uterus (n=40)



Conclusion

Incidence of placenta previa and its associated complications is definitely more in scarred group when compared to unscarred group with statistically significant values for ICU admission. So, primary prevention in form of reduction in rate of primigravida Cesarean section must be done in order to prevent likelihood of placenta previa in scarred uterus and its associated morbidity. Early diagnosis and planned institutional delivery with multidisciplinary care should be the goal in both groups.

References

[1]. Bahar A Abusham, Eskandar M, Sobanda A, Alsunaidi M. Risk factors and pregnancy outcome in different types of placenta previa J Obstet Gynaecol Can. 2009;31:126–31