ORIGINAL RESEARCH PAPER

Medical Science

PLACENTA PREVIA AND MATERNAL OUTCOMES

KEY WORDS: Placenta Previa; Maternal Morbidity ; Antepartum haemorrhage

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ABSTRACT

AIM To analyse maternal outcome in pregnancies with placenta previa ..

BACKGROUND AND OBJECTIVES To study the risk factors for placenta previa, the mode of deliveries, maternal outcome and the incidence of placenta previa.

METHODS Pregnancies with placenta previa during a 2 years study period (2018-2020) were analysed. .The data on the potential risk factors was compiled; the information on the maternal outcome was subjected to statistical analysis and following observations were made.

RESULT The incidence of placenta previa was 2.02%. Factors significantly associated with development of placenta previa were advanced
maternal age, number of previous LSCS, number of previous abortions and multiparity.

CONCLUSION In the present study, the incidence of antepartum haemorrhage was 4.9% and placenta previa contributed to 37% of cases..The maternal mortality rate due to placenta previa in this
study is nil, but maternal morbidity was high, that is more than 60% of cases had antenatal, intranatal and postnatal complications

INTRODUCTION

Placenta praevia means the placenta located in the lower uterine segment which is less than 2.5 cms from internal cervical os [1]. It is one of the major cause of antepartum hemorrhage . It complicates two to five percent of the pregnancies.[2] It is one of the major causes of significant maternal morbidity and mortality. Perinatal mortality rates are three or four times higher than in normal pregnancies.[3-4]
The risk factors for developing placenta praevia are previously scarred uterus, grand multiparty, maternal age of more than 35 years, recurrent abortion and intrauterine curettage [5-7]

Maternal morbidity is due to abnormal placentation, increased risk of section , blood transfusion and ICU care and fetal morbidity in the form of preterm, low birth weight, low Apgar and need for NICU care makes it a must for care in a higher center.[8-10]

AIM OF THE STUDY

1.To study the maternal outcome.
2.To study the incidence of placenta previa.

MATERIAL AND METHODS

This is a prospective observational study carried out at Umaid Hospital,Jodhpur, in the Department of Obstetrics and Gynaecology between August 1st 2018 to August 31st 2020. Clearance was taken from the ethical committee.

Inclusion criteria: All the antenatal women with placenta previa beyond 28 weeks of gestational age, confirmed by ultrasonography were taken into study irrespective of their parity and type of placenta previa. Consent of women was taken.

EXCLUSION CRITERIA : multiple pregnancies.

OBSERVATIONS AND RESULTS-

Table 1- Incidence

Total deliveries	9567
No. of patients with placenta previa	194
Incidence	2.02%

Total Number of Deliveries were 9567 Total Number of Placenta Previa 194.Therefore, the incidence is 2.02%.

Table 2- Maternal age and graidity

Age in years	No. of cases	percent	gravida	number	percent
<19	2	1.03%	G1	46	23.7%
20-29	146	75.2%	G2	74	38.14%
30-35	35	18.04%	G3	63	32.4%
>35	11	5.67%	G4	11	5.6%
Total	194	100%		194	100%

Most of the patients were in the age group OF 20- 29 years, which accounted for 75.2% (n=146). The mean maternal age in the study was 27.43 years+4.5 SD. In our study, most of the patients (n=148) were Multi parous 76.28%. Primi patients were 23.71% (n=46). P value – 0.01 significant.

Table 3 –types of placenta previa

Types of placenta	number	percent
I	9	4.63%
II A (Anterior) II B (Posterior)	30 19	15.4% 9.79%
III	61	31.4%
IV	75	38.6%
Total	194	100%

In our study, 20.10% (n=39) patients had minor type of placenta previa and 79.89% (n=155) patients had major type of placenta previa. P value – 0.02 significant.

Table 4- Mode of delivery

Type of placenta	Number	Vaginal delivery	LSCS
I	9	9 (100%)	0%
II A II B	30 19	6 (20%) 0%	24 (80%) 19 (100%)
III	61	0%	61 (100%)
IV	75	0%	75 (100%)
Total	194	15 (7.73%)	179 (92.2%)

Out of 194 patients, 7.73% (15) patients delivered vaginally. 1.72% (3) had type II B placenta previa, but they were allowed for a trial of vaginal delivery with close monitoring, one had intra uterine fetal demise, one fetus had multiple anomalies and one fetus was extreme preterm and had low birth weight.

Table 5- Intra operative complications

Complications	I	II A	II B	III	IV	Total
Haemorrhage	2 (2.53 %)	9 (11.39 %)	12(15. 18%)	23 (29. 11%)	33 (41. 72%)	79
Hameostatic suturing	0	3 (14.28 %)	2 (9.52 %)	4 (19. 04%)	12 (57. 14%)	21 P value <0.025
Placenta cut through	0	5 (10.63 %)	0	17 (36. 17%)	25 (53. 19%)	47

Uterine artery embolisation	0	0	0	1 (7. 69%)	12 (92. 30%)	13 P value < 0.05
Uterine artery ligation	0	0	0	1 (11. 11%)	8 (88. 88%)	9 P value <0.002
Bakri baloon	0	2 (5.12%)	9 (23. 07%)	10 (25. 64%)	18 (46. 15%)	39
Placenta bed oozing	0	0	3 (9.67 %)	9 (29. 03%)	19 (61. 29%)	31
hysterectomy	0	0	0	0	2 (100%)	2 P value <0.0001
adhesions	0	2 (10%)	4 (20%)	8 (40%)	6 (30%)	20
Maternal mortality	0	0	0	0	0	0

Out of 79 patients with APH 86.07% (68) had placental type major. Out of 47 patients for which LSCS was done, 89.36% (42) had placenta which was cut through.

Out of 21 patients for which haemostatic suturing was done, 85.7% (18) had major placenta previa. Significant p value – 0.025.

Out of 13 patients for which uterine artery ligation was done, 100% (all 13) had major placenta previa. Significant p value – 0.05

Out of 9 patients for which uterine artery ligation was done, 100% (all 9) had major placenta previa. Significant p value – 0.02

Out of 31 patients who had placental bed oozing, 93.93% (31) had major placenta previa.

Out of 39 patients for which bakri balloon was inserted, 94.87% (37) had major placenta previa.

Out of 2 patients who underwent caesarean hysterectomy, 100% (both) had major placenta previa.

Table 5- Obstetric morbidities

	I	II A	II B	III	IV	Total
Blood transfusions	2 (2.89 %)	3 (4. 34%)	13 (18. 84%)	23 (33. 33%)	28 (40.57%)	69 (p value 0.007
ICU admissions	0	0	5 (17. 85%)	9 (32. 14%)	14 (50%)	28 (p value <0.001)
Caesarean Hystrectomy	0	0	0	0	2 (100%)	2 (p value <0.001)
Post op hystrectomy	0	0	0	2 (66.66 %)	1 (33.33%)	3(p value<0.001)

92.75% (64) blood transfusions were given to patients with major type placenta previa. 100% (28) of ICU admissions were for major type of placenta previa. 100% (2) of caesarean hysterectomies were done for type IV placenta previa. 100% (3) of hysterectomies done after primary caesarean sections, were for type IV placenta previa.

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