



Fetomaternal outcome in Placenta Previa in scarred uterus

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Abstract

Abstract:-Placenta Previa with scarred uterus is the major cause of antepartum haemorrhage that causes serious morbidity and mortality to both fetus and mother.

Objective:-To study the antepartum, intrapartum, Postpartum complications in placenta previa with scarred uterus. To study the fetal outcome in Placenta previa with scarred uterus.

Material Methods:- This is the one year prospective study conducted in Rajindra hospital Patiala in cases of placenta previa with scarred uterus. During the study period out of 3784 deliveries 86 cases of placenta previa were reported. There were 48 cases of placenta previa in Patients with scarred uterus.

Results:- Present study confirmed that incidence of placenta previa in scarred cases is significantly higher than overall incidence. Majority of scarred uterus had anterior Placenta previa.. The no. Of unbooked cases was high. There were two maternal deaths. Our study showed favourable fetal outcome.

Conclusion:- An increase in the incident of Prior caesarean section probably contribute to a rise in the number of pregnancies complicated with placenta previa, adherent placenta and its association with adverse maternal and perinatal outcome.

Keywords: Placenta previa, previous,caesarean adherent placenta.

Introduction

Placenta previa with scarred uterus complicates 0.3%-0.5% of all pregnancies and is a major cause of third trimester haemorrhage.¹Condition may be multifactorial and postulated to be related

to multiparity, previous scar which may be due to cesarean, previous D&C or myomectomy ...The risk of adherent placenta increases to 11%,40% and 61% with previous one, two and three

cesarean sections.². Significant maternal morbidity in the form of increased incidence of Caesarean delivery, increased blood loss and peripartum hysterectomy have been noted in cases of placenta previa and can lead to prolonged hospitalisation in these women.

Premature deliveries can occur which lead to higher admission to neonatal intensive care unit and stillbirths.¹

placenta previa has been classified according to its relation with internal os.^{9}

1. placenta previa: the internal os is covered partially or completely by placenta
2. low lying placenta: implantation in the lower uterine segment is such that the placental edge does not reach the internal os and remains outside 2 cm wide perimeter around the os.

Along with history, clinical examination and ultrasound, MRI has been used in patients with placenta previa, esp. to diagnose adherent placenta. It has been speculated that uterine scarring due to trauma, infection or surgery lead to endomyometrial junction abnormality causing abnormal vascularisation which reduces the differential growth of the lower segment. This

prevents placental migration as pregnancy advances.¹.

The aim of this study was to examine the risk factors and obstetrical outcome in previously scarred uterus with placenta previa.

Method

This prospective study was conducted in the department of OBGY at Rajindra Hospital Patiala. Cases of placenta previa in scarred uterus from Feb 2016 to Jan 2017 were studied.

Women over 28 weeks of gestation with placenta previa in scarred uterus were identified. Placental localisation was achieved by transabdominal ultrasounds in these patients.

Risk factors in terms of maternal age, parity, gestational age, and previous uterine surgery (myomectomy, cesarean section, hysterotomy and curettage) were studied.

Data tabulation

Total number of deliveries=3784
 Total no. of scarred cases=1525
 Total number of placenta previa=86
 Overall incidence of placenta previa=2.27%
 Total no. of placenta previa in scarred cases=48
 Incidence in scarred uteri=3.14%
 Incidence in unscarred uteri=1.68%

Table 1: Maternal characteristics

<25	15	31.25%
25-30	24	50%
31-35	6	12.5%
>36	3	6.25%
Parity		
0	0	0
1	24	50
2	11	22.91
>3	6	12.5
History of curettage	7	14.5
Gestational age(weeks)		
<37	30	62.5
>37	18	37.5

Maternal characteristics of the two groups are given in Table 1. 50% of women in the study were between 25-30 years of age (50%) while 6.25% of women with scarred uteri were over 36 years of age. More than 50% of women were

multiparous. A definite association of placenta previa following curettage was observed (14.5%). Significant no. of women delivered before 37 weeks of gestation (62.5%). High number of patients were unbooked (66.6%).

Table 2: Type and grading of placenta previa

Major	21	43.75
Minor	27	56.25
Type		
Anterior	38	79.16
Posterior	10	20.83
Invasive placenta		
Accrete	3	6.25
Percreta	3	6.25

Table 2: 43.75% had major degree placenta previa. Majority of the patients had anterior

placenta(79.16%). There were 3 cases of placenta accrete and 3 of placenta percreta(12.5%)

Table 3: Complication

Fetal malpresentation	14	29.16%
PPH	18	37.5%
Placenta accrete	3	6.25%
Placenta percreta	3	6.25%
Maternal mortality	2	4.16%

Table 4: Management of Complications

Blood transfusion	34	70%
Uterotonics	8	44.44%
Placental bed suturing	2	11.11%
Uterine packing	1	5.55%
Ballon tamponade	2	11.11%
Uterine artery ligation	5	27.7%
Internal iliac ligation	0	0%
Cesarean hysterectomy	6	12.5%

Table 3: Shows the complications. There were two maternal deaths. There were 18 Cases of PPH out of which 8 (44.44%) Controlled by uterotonics alone.. Uterine artery ligation done in

27.7%. Blood Transfusion given in 70% of cases. There were 3 cases of placenta accreta, 3 cases of placenta percreta. All of them required cesarean hysterectomy.

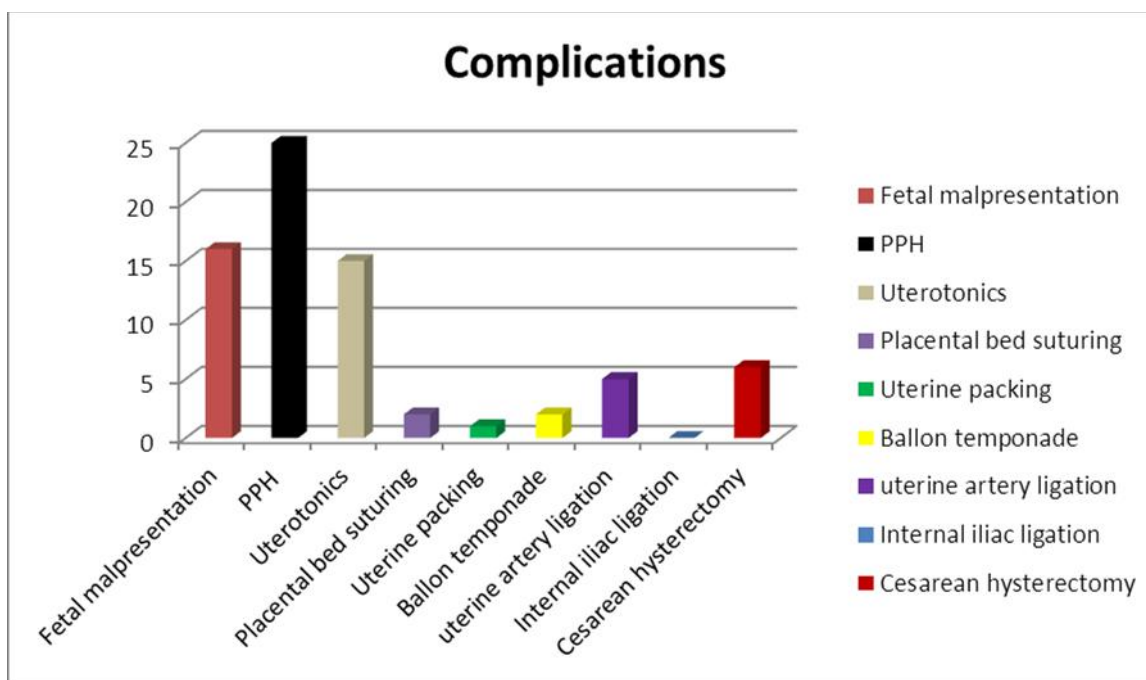


Table 5: Distribution of fetal outcome

Fetal outcome	No.	%
Alive	38	79.16
Still birth	3	6.25%
Neonatal deaths	7	14.58
Total	48	

Fetal outcome was favourable.(79.16%)

Table No.6 Distribution according to mode of delivery

Mode of delivery	No.	%
vaginal	2	4.16%
Emergency cesarean	28	58.33%
Elective cesarean	18	37.5%
Total	48	

Vaginal delivery occurred in 4.16% patients with scarred uterus. 58.33% Patients needed emergency Caesarean sections.

Table 7-Relative Incidence

Overall incidence of placenta previa	Incidence in scarred uteri	incidence in unscarred cases
2.27%	3.14%	1.68%

Discussion

The overall incidence of placenta previa in our study was 2.27% which is higher than the study by Gayatri et al (0.62%), Reddy et al (0.5%) and Ahmed et al (1.3%). The incidence of placenta previa in women with scarred uterus in our study group was 3.14%. This is higher than study by Gayatri et al and Ahmed et al (2.2%)².

On studying risk factors for placenta previa, it was found that the incidence of placenta previa goes on increasing as maternal age advances. In our study maximum number of women were between 25-30 years of age (50%) & 21.6% in 20-25 years of age. While Gayatri et al reported the incidence of placenta previa as 68% in 20-25 years. Reddy et al reported 73% incidence in 20-29 years age group⁴ which is comparable to 71.6% in our study. According to the study by Hung et al 71.3% were in age group of 20-35 years which is lower than our results i.e 84.1%.¹

Our study shows increasing parity increases the risk of placenta previa. The results are consistent with Reddy et al in which 69% were multiparous.^{3,4}

Anterior placenta is commoner in patients with previous cesarean sections. In our study significantly higher no. of 79.16% cases had anterior previa which is consistent with the study of Gayatri et al 85.3% ant. placenta in scarred uterus.³

62.5% women had preterm births. Similar results were found by Gayatri et al where 58% of women had premature births.³

There were 3 still births (6.25%) in our study as compared to 9% in the study by Gayatri et al and 13.2% by Ahmed et al.²

There were 2 maternal deaths in this study as compared to no death in the study of Ahmed et al.²

There were only 2 vaginal deliveries in a patient with grade 1 placenta previa who presented with bleeding and active labour.

Incidence of placenta accreta is greater in patients with prior cesarean section than in unscarred uterus. In our study 12.50% out of the scarred uterus constitute placenta accreta and percreta which is slightly higher than study of Clark et al who concluded that probability of placenta accreta is greater in patients with prior cesarean section. This higher incidence is because ours is a tertiary care referral centre which caters to large no. of referral cases from civil hospitals of Punjab and even adjacent states like Haryana.

Conclusion

In conclusion primary prevention in the form of reduction in the rate of primi cesarean section must be done in order to prevent likelihood of placenta previa in scarred uteri. The emphasis should be on institutional delivery in a tertiary care centre with multidisciplinary care i.e. involvement of senior obstetrician, anaesthetist, neonatologist, sonologist and haematologist.

Sonographic detection of anterior placenta is very important to predict maternal outcome in placenta previa and in such cases obstetricians should be aware of maternal massive hemorrhage. The family planning services should be further improved to attain a decline in the number of women of high parity. The morbidity associated with placenta previa can be reduced by detecting the condition in the antenatal period by ultrasound, before it becomes symptomatic. Early diagnosis by ultrasound and planned delivery should be the goal.

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