

Frequency of Placenta Previa in Scarred and Non Scarred Uterus

AMNA JAVED¹, FAKHARUNISSA², SAMAR HUSSAIN³, SABAHAT ALI ZAIDI⁴, NAIM ASHRAF⁵, SYEDA TAHSEEN FATIMA⁶

¹Senior Registrar, Ameer-ud-Din Medical College, Lahore General Hospital, Lahore.

²Associate Professor, Department of Obstetrics and Gynecology, Indus Medical College Tando

³Assistant Professor Gynae & Obstetrics, Rashid Latif Medical College

⁴Senior Medical Officer, Department of Family Medicine, University College of Medicine & Dentistry, The University of Lahore.

⁵Associate Professor Pathology, Al-Aleem Medical College, Lahore.

⁶Biostatistician, University College of Medicine & Dentistry, The University of Lahore

Correspondence to: Amna Javed, Email: dramnajaved2008@gmail.com, Cell:0333-4756307

ABSTRACT

Introduction: An obstetric complication, Placenta Previa usually arises in the, second and. third. pregnancy trimester. This may result in serious nature of it may cause serious incidences and death rate to the mother. There is a huge risk of placenta accreta, in the pregnant women having placenta previa and prior history of cesarean.

Objective: To the frequency of placenta Previa in patients coming to a tertiary care unit with previously scarred and non-scarred uterus.

Material & Method

Study design: Descriptive Cross Sectional Study

Settings: Department of Obstetrics, Gynecology, Lahore General Hospital, Lahore.

Duration: Six months i.e. 1st July 2021 to 31st December 2021

Data Collection procedure: 144 sample size was calculated with 80% power of test and 5% level of significance by taking expecting 5%. Female present with age of 20-40 years with scarred and non-scarred uterus and singleton pregnancy and Gestational age 28 weeks and onwards were included. Second trimester bleeding & scars, primi gravidas patients were excluded from the study. Complete history was taken regarding parity, age & duration of gestation. Data was analyzed using SPSS version 24. For qualitative data like Age groups, Gravidity, previous section was presented as frequency & percentages. For quantitative data like age was presented as mean and SD was calculated.

Results: 144 females were included; the mean age was 32.23 ± 12.34 years. Mostly females were belonging to 26-30 years 66(45.8%). Gestational age revealed that 20(13.8%) were between 28-32 weeks, 30(20.83%) were 31-35 gestation week and 94(65.2%) were 36-40 weeks of gestation. Placenta Previa found in previously scarred uterus was 98(68.05%), while it was 46 had previous vaginal delivery. About gravidity, 80 patients were between G2-G4, 54 were between G5-G7 and only 10 were more than G7.

Conclusion: Frequency of placenta previa is higher in scared uterus in our study than non-scarred uterus.

Key words: Pregnancy, Placenta Previa, Frequency, Scarred

INTRODUCTION

An obstetric complication, Placenta Previa usually arises in the, second and third pregnancy trimester. This may result in serious nature of it may cause serious incidences and death rate to the mother^{1,2}. There is a huge risk of placenta accreta, in the pregnant women having placenta previa and prior history of cesarean³. Its rate of occurrence has also increased in the recent decades⁴, this could be due to the elevated rates of cesareans⁵.

The complications of placenta previa are antepartum hemorrhage, adherent placenta, postpartum hemorrhage (PPH), shock, and peripartum hysterectomy resulting in evident maternal morbidity, leading to long term hospitalization. The fetal complications include intrauterine growth, restriction (IUGR) (15% incidence), premature delivery and death. Premature births and IUGR results in high frequent admission, to NICU and stillbirths⁶.

The rate of complications lies between 0.3% - 0.5% of all pregnancies and is a main cause hemorrhage in, third-trimester⁷. Moreover, in Asian population, about 30 % maternal deaths are caused by the major obstetrical, hemorrhage in placenta previa, particularly due to rise in the number of C-Sections⁸. Further, there is an elevated risk of 1.5-5 folds when there is a history of caesarean

delivery. And with an increased deliveries, the risk can be as great as 10%^{9,10}.

In addition, a retrospective case control study, done on 85 cases of placenta previa. The frequency in scarred uterus was 54% and that in unscarred uterus was 46%. Eighty percent cases with scarred uterus had anterior placenta compared to 33% of cases of unscarred uterus with p value of 0.009¹¹.

Therefore, the study was conducted to determine the frequency of placenta Previa in patients coming to a tertiary care unit with previously scarred and non-scarred uterus.

MATERIAL AND METHODS

This Descriptive Cross sectional study was conducted January 2020 December 2020 from Gynecology Department, Lahore. 155 sample size was calculated with 80% power of test and 5% level of significance by taking expecting 5%. A written informed consent was taken from every patient in the study.

Female present with age of 20-40 years with scarred and non-scarred uterus and singleton pregnancy and Gestational age 28 weeks and onwards were included. Second trimester bleeding & scars patients were excluded from the study. Complete history was taken regarding

parity, age & duration of gestation. All the information was collected through pre-designed Performa.

Data was analyzed using SPSS version 24. For qualitative data like Age groups, Gravidy, previous section was presented as frequency & percentages. For quantitative data like age was presented as mean and SD was calculated.

RESULTS

In our study, 144 females were included, the mean age was 32.23 ± 12.34 years. There were 38(26.3%) patients between 20-25 years of age group, 66(45.8%) were 26-30 years, 32(22.2%) were between 31-35 years and only 8(5.5%) were 36-40 years of age group. Gestational age revealed that 20(13.8%) were between 28-32 weeks, 30(20.83%) were 31-35 gestation week and 94(65.2%) were 36-40 weeks of gestation. Table:1

Table 1: Age and Gestational Age patients with placenta previa in previously Scarred and Non scarred uterus

| | | Frequency % |
|-----------------|-------------|---------------|
| Age | Mean ± SD | 32.23 ± 12.34 |
| | 20-25 | 38(26.3%) |
| | 26-30 | 66(45.8%) |
| | 31-35 | 32(22.2%) |
| | 36-40 | 8(5.5%) |
| Gestational Age | 28-32 Weeks | 20(13.8%) |
| | 31-35 Weeks | 30(20.83%) |
| | 36-40 Weeks | 94(65.2%) |

In our study, the frequency of placenta previa found in previously scarred uterus was 98(68.05%), while it was 46 had previous vaginal delivery. About gravidity, 80 patients were between G2-G4, 54 were between G5-G7 and only 10 were more than G7. Majority of the patients 56(38.8%) had parity of 2 followed by 40 (27.7%) patients who had parity of 1. Table: 2

Table 2: Frequency of Gravidity

| | | Frequency % |
|-----------------|--------------------|-------------|
| Placenta Previa | Scarred Uterus | 98(68.05%) |
| | Non-Scarred Uterus | 46(31.94%) |
| Gravidity | G2-G4 | 80(55.5%) |
| | G5-G7 | 54(37.5%) |
| | >G7 | 10(6.94%) |
| Parity | 1 | 40(27.7%) |
| | 2 | 56(38.8%) |
| | 3-4 | 28(19.44%) |
| | >4 | 20(13.8%) |

According to previous caesarean sections, previous placenta previa was done which showed that out of 94 cases of placenta Previa, 22 had history of previous one LSCS, 32 had two LSCS, 36 had three LSCS and only 4 had four LSCS.

Table 3:

| No. of previous C sections | Frequency (%) |
|----------------------------|---------------|
| 1 | 23(23.4%) |
| 2 | 32(32.65%) |
| 3 | 36(36.73%) |
| 4 | 7(7.14%) |

DISCUSSION

Placenta Previa can have seriously unfavorable effects for both mother and baby, which involves an increased probability of maternal and neonatal deaths, fetal growth restriction and preterm delivery, antenatal and intrapartum hemorrhage, and women might need to be done blood transfusions or even an emergency hysterectomy. There are many other fatal consequences, in both the mother and fetus, which includes fetal growth restriction, intrapartum hemorrhage, antenatal hemorrhage, preterm delivery, emergency hysterectomy, massive blood transfusion and neonatal mortality¹². The frequency was higher in patients having a history of C-Section, uterine surgery and any bad accident to uterus¹³.

In a study by Majeed T et al¹⁴ including 114 patients with a age distribution (47.36%) between 26-30 years and gestational age between 36- 40 weeks was found in (70.17%) patients. Most of the patients of this have gradation between G2-4 in the meantime rate of placenta Previa in non-scarred and scarred uterus was observed in 32.45% (37) and 67.54% (77) patients. The Degree of placenta previa in Major degree in 88 patients (77.19%) and minor degree in 26 patients (22.80%).

These results are in line with a study Bashir SG et al¹⁴ reported placenta previa 1.19% in scarred uterus and 98.81% in non scarred uterus.

Further, in a study Iqbal K et al¹⁵ the high rate of placenta previa was found in with scarred uterus and previous C-sections, the results were that this could be reduced by family planning and care full evaluation of delivery mode. In another study by Umbeli T et al¹⁶, placenta previa in 2.8% of cases, most of previa were found in scarred uterus. As number of uterine scars increase chances and incidence of placenta previa also increases, he concluded that frequency of our finding comparable with this study.

CONCLUSION

Frequency of placenta previa is higher in scared uterus in our study than non-scarred uterus.

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