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INCIDENCE, RISK FACTORS AND FETOMATERNAL OUTCOME IN PLACENTA PREVIA:

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ABSTRACT

Introduction: The normal situation of the placenta is vital for appropriate growth and development of the fetus. The incidence, risk factors and outcome of placenta previa is largely unstudied in our population.

Aims & Objectives: Objective of this study was to determine the incidence, risk factors, obstetric management and perinatal outcome in women presenting with placenta previa.

Methods:-A retrospective observational study was conducted at tertiary maternity hospital over a period of 2 years and 4 months from May 2016 to September 2018. All the patients with placenta previa were included in this study, detailed history related to age, parity, previous abortions and cesareans was documented, and moreover, their intraoperative complications and management was studied. For newborn, gestation age at delivery and perinatal outcome was studied.

Results. During the study period there were 7382 deliveries out of which 0.8% were complicated with placenta previa. Out of the cases of placenta previa, 20 patients were primigravida and 40 were multigravida. Amongst multigravidas , 7 patients had 1 abortion, 6 had history of 2 abortions, 15 patients had history of previous 1 LSCS ,12 had history of previous 2 LSCS, 3 had history of previous 3 LSCS and 3 patients had history of normal vaginal delivery. Regarding intra operative complications, hemorrhage was noted in 36 patients, delivery through placenta in 22 patients, management by haemostatic suturing in 26 patients,uterotonics were administered in 14 patients, uterine artery ligation in 8 patients, adherent placenta in 9 patients . Perinatal outcome was calculated with accordance to live term births in 65%, live preterm births in 23.3%, neonatal deaths in 5% and IUD in 6%.

Conclusion: We found a high incidence of placenta previa in our Centre .Nearly half of the patients had history of previous uterine surgeries. Hemorrhage was the most common complication .Preterm births were seen in nearly one fourth of patients.

KEYWORDS : Placenta previa, fetomaternal outcome, abortion, LSCS

INTRODUCTION:-

The placenta forms the most important link between the developing fetus and mother. The normal situation of the placenta is vital for appropriate growth and development of the fetus[1]. Once there is a change in placental location or architecture, the outcome of pregnancy (maternal and fetal) is altered. The placenta is usually situated in the upper uterine segment usually near the fundus on the posterior wall of the uterus and less frequently located on the anterior wall. Sometimes for other causes or reasons, the placental position may alter; lying wholly or partially in the lower uterine segment resulting in placenta previa (or praevia).The incidence is approximately 4 to 5 per 1000 pregnancies[2, 3]. The risk factors[4] associated with it are well known and include age, parity, multiple gestation, endometrial damage following therapeutic termination in first trimester (6 fold increase) and previous caesarean section (1.9% increased risk in previous 1 LSCS and 4.1% increased risk in previous 2 LSCS). Accreta occurs in 3.3% of unscarred uterus, in 11% of patients with previous one caesarean section & 40% in patients with previous 2 LSCS. [5, 6] Smokers have more than two times risk than non smokers. In patients with congenital malformation of the fetus there is twice common risk of placenta previa[7]. In patients with abnormal presentation, 30-35% cases have associated placenta previa. [8,9,10]

AIMS & OBJECTIVES:

Objective of this study was to determine the incidence, risk factors, obstetric management and perinatal outcome in women presenting with placenta previa.

METHODS:-

A retrospective observational study was conducted maternity hospital SKIMS Soura Srinagar over a period of 2 years and 4 months i.e. from may 2016 to September 2018. All the patients with placenta previa were included in this study, detailed history related to age, parity, previous abortions and cesareans was documented, and moreover, their intraoperative complications and management was studied. For newborn, gestation age at delivery and perinatal outcome was studied.

RESULTS:-

During the study period there were 7382 deliveries out of which 60 (0.8%) were complicated with placenta previa. Out of the cases of placenta previa 20(33%) patients were primigravida and 40(67%) were multigravida. Amongst multigravidas, 7 patients had 1 abortion, 6 had history of 2 abortions, 15 patients had history of 1 LSCS, 12 had history of 2lscs 3 had history of 3lscs and 3 patients had history of normal vaginal delivery. Type II b was commonest type of placenta previa was depending on the location (noted by ultrasound or intra operatively) are shown in the table 1.Regarding intra operative complications,haemorrage was noted in 36 patients, delivery through placenta in 22 patients, management by haemostatic suturing in 26 patients, uterotonics were administered in 14 patients, uterine artery ligation in 8 patients, adherent placenta in 9 patients. Intra operative bleeding was managed by intrauterine packing in 33.3%, caesarean hysterectomy in 66.6%. The complications were studied according to type of placenta previa are shown in table 2. Prenatal outcome was calculated with accordance to live term births in 39(65%), preterm births in 14(23.3%), neonatal deaths in 3 (5%) and IUD in4 (6%).

DISCUSSION:-

The incidence and of placenta previa has significantly increased over the passing years,in our study it came out to be 0.8%as it has paralleled the increase in cesarean section rate. The relatively high incidence is found in our Centre as most of the complicated cases are being referred to our hospital as it's the only tertiary care hospital in the valley in which a multidisciplinary approach is available[13].

Nearly half 45% of our patients with placenta prevail had prior uterine surgeries, amongst which LSCS is the most common one. so its very important to avoid unnecessary cesarean sections [14 1516]. In our hospital its done only when indicated medically but in private setup numerous cesarean sections are being done on maternal requests[17 18]. Vaginal deliveries after cesarean section can be offered to such patients to avoid placental adherence, moreover, a group of patients in our study underwent curettages for abortions, these patients can be benefited by less invasive approach such as medical termination by misoprostol whenever this is in accordance with clinical and personal prerequisites[1920].

Hysterectomy rate in our study was 155 including all types of placenta

previa due to abnormal adherence of placenta to uterus and surrounding structures especially bladder[21 22]. Jang et al performed a study looking at different localization and found the anterior position increases the incidence of excessive blood loss, massive transfusion and adherence[2324]. Therefore detailed sonographic determinations may contribute in prediction of maternal outcome[2526].

A major neonatal risk factor increasing adverse outcome is preterm birth .Delivery prior to 37 weeks occurred in 23, 3% of our population 15.This is because of elective preterm cesarean deliveries done in placenta previa[27].

Table 1 Types Of Placenta Previa

TYPE OF PLACENTA	NUMBER	PERCENT
TYPE I	12	20%
TYPE IIa	9	15%
TYPE IIb	16	26.7%
TYPE III	10	16.7%
TYPE IV	13	21.7%
TOTAL	60	

Table 2 Complications According To Type Of Placenta Previa

Complication	Type 1	Type IIa	Type IIb	Type III	Type IV	Total
Haemorrrage	5(13.9%)	7(19.4%)	7(19.4%)	6(16.7%)	11(30.6%)	36
Placenta Cut Through	2 (9.1%)	7 (31.8 %)	0	4 (18.2%)	9 (40.9%)	22
Haemostatic Suturing	2(7.7%)	5 (19.2%)	6 (23%)	5 (19.2%)	8 (30.7 %)	26
Uterotonics	2(14.1%)	3(21.4%)	3(21.4%)	3(21.4%)	3(21.4%)	14
Uterine artery ligation	1(12.5%)	3(37.5%)	1(12.5%)	0	3(37.5%)	8
Placental bed Ooze	0	2(12.5%)	4(25%)	4(25%)	6(37.5%)	16
Accreta/Percreta	1(11.1%)	1(11.1%)	0	1(11.1%)	6(66.7%)	9

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