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ORIGINAL ARTICLE

Maternal and fetal outcome of placenta previa.

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ABSTRACT… Objectives: To determine the maternal and fetal outcome in patients presented with major degree Placenta previa and to evaluate the Potential risk factors. **Study Design:** Descriptive Case Series study. **Setting:** Department of Obstetrics and Gynecology Independent University Hospital Faisalabad. **Period:** January 2020 to February 2021. **Material & Methods:** All patients with major degree previa confirmed by ultrasonography beyond 28 weeks of gestation were selected irrespective of their parity, type of placenta previa and with live or dead fetus. **Results:** Total 38 patients were selected with Major degree placenta previa in 1 year of duration. 47% patients were in age group 31-35 years and 65.7% patients were grand multi-para. In our study 73.6% patients were having previous scar uterus. All patients received blood transfusions and cesarean hysterectomy in 36.8% of patient's done due to placenta previa and uncontrolled hemorrhage. Only 2 patients got bladder injuries during surgery and in one patient required hysterectomy has to be done later. Regarding neonatal outcome 47.3% neonates were active and required no resuscitation and 21% neonates expired within 48 hours. **Conclusions:** Now a day's major degree placenta previa is a main obstetrical challenge associated with blood transfusion, ICU admissions and Obstetrical hysterectomy. Fetal outcome was relatively satisfactory. Maternal complications can be reduced by early diagnosis, Identification of the risk factors, correction of Anemia, Blood arrangement & Team work in Territory care hospital.

Key words: Cesarean Hysterectomy, Fetal Outcome, Metarnal Outcome, Neonatal Intensive Care Unit, Placenta Previa.

INTRODUCTION

Patients with placenta previa is labeled when placenta partly or entirely located within lower uterine segment. It has high maternal & fetal complications which accounts for 1in 200 live birth.[1] Antepartum hemorrhage accounts 2 to 5% of the pregnancies. In Pakistan one study showed the incidence of placenta previa is 6.7% of deliveries.[2] vaginal bleeding in any stage of pregnancy is alarming sign for both Patient and doctor but vaginal bleeding in second half of pregnancy is usually due to placenta previa, placental abruption neglected pregnancies, increase parity, advance maternal age and previous scar.[3] The risk of Placenta previa is increasing day by day due to increase number of cesarean sections. The patient having > 3 cesarean deliveries the chance of having placenta previa is > 37%. Morbidly adhered placenta is another lethal complication of placenta previa leading to increase maternal & fetal morbidity and mortality, which can be reduced by delivering the patient in tertiary care hospital with Multidisciplinary team and massive transfusions.[4]

In developed country Mortality due to placenta previa is almost nil. The maternal and fetal outcome can definitely be improved in placenta previa if patient is diagnosed in antenatal period with Doppler studies. Risk factors should be identified and patient should be delivered in centers where facilities for blood transfusion, immediate operative interventions and NICU facilities are present around the clock.

Placenta previa is an obstetrical challenge owing to its association with substantial feto maternal morbidity and mortality of the fetuses of patients having placenta previa are also at stake. They may have low APGAR score, increased perinatal

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mortality and prematurity.[5] The study is significant due to the reality that placenta previa is an important factor in feto maternal morbidity and mortality.

MATERIAL & METHODS

This descriptive study was conducted in one year of duration from January 2020 to February 2021. Total 38 patients were included in this study. The study was conducted after ethical committee approval all patients who were diagnosed as placenta previa on ultrasonography beyond 28 weeks of gestation irrespective of age, parity, type of placenta previa and with live or dead fetus were included in the study. The patients with APH before 28 weeks of gestation were excluded from the study. The patients admitted from OPD or emergency according to symptoms, then complete history including last Menstrual period (LMP), previous pregnancies, mode of delivery, age, history of blood transfusions, episode of vaginal bleeding, Gestational age, Ultrasound reports, history of D&C were obtained. Patient were generally examined. All baseline investigations & Doppler study were done. Then operative findings including operative measure to control hemorrhage, Obstetrical Hysterectomy & any itrogenic complications were noted. Fetus was examined for weight, APGAR score & admissions in NICU.

RESULTS

Age in (years)	Frequency	%
31-35	18	47
36-40	10	26.3
26-30	6	15.7
26-25	4	10.5

Table-I. Distribution of patients according to age. n=38

Parity	Frequency	%
Para 2-4	25	65.7
Para 5 & above	11	28.9
Para 0-1	2	5.2

Table-II. Distribution of patients according to parity. n=38

Gestational Age	Frequency	%
33-37 weeks	18	47.3
28-32 weeks	8	21
>37 weeks	2	5.2

Table-III. Distribution of patients according to gestational age. n=38

Previous Scar	Frequency	%
>than 3	28	73.6
1-3	10	26

Table-IV. Distribution of patient according to previous scar. n=38

Obstetrics Complications	Frequency	%
Blood Transfusions	38	100
Cesarean Hysterectomy	14	36.8
ICU care	4	10.5
Bladder Injuries	2	5.2
Hysterectomy done later	1	2.6
Gut Injuries	Nil	0

Table-V. Major obstetrics complications. n=38

Gestational Age	Frequency	%
No of neonates requiring no resuscitation	18	47.3
NICU admissions	12	31.5
Expired within 48 hours	8	21

Table-VI. Neonatal outcome. n=38

Total number of patient delivered in one year in Independent university Hospital was 462 out of which 38 patients were APH, so incidence of APH was 12.4%.

The present study conducted for one year in Independent university hospital Faisalabad for analysis of Maternal & fetal outcome, identified risk factors & complications for placenta previa. According to our study 18 (47%) patient out of 38 patients were in age group 31-35 years, 10 (26.3%) patients were in age group 36-40 years, 6 (15.7%) patients were in age group 26-30 years & only 4(10.5) patients were in young age group 20-25 years.

According to my study 11 (28.9%) patients were P5 & above, 25 (65.7%) patients were P2-P4 & only 2 (5.2%) patient were primi para.

About 18 (47.3%) patients out of 38 patients presented with APH were of gestation 33-37weeks, 2 (5.2%) patients were presented at term > 37 weeks & 8 (21%) patients were extreme premature 28-32 weeks presented with APH.

According to present study 28(73.6%) patients out of 38 patients had more than previous 3 LSCS & 10 (26%) patients had 1-3 previous LSCS.

According to current study all patients (100%) with APH got blood transfusions, 14 (36.8%) patients end-up in cesarean hysterectomy and 2 (5.2%) patient got bladder injuries and in 1 patient we have to do hysterectomy later on, 4 patients got admission in ICU and no patient got Gut injuries.

In current study 18 (47.3%) babies required no resuscitation, 12 (31.5%) babies need NICU admissions & 8 (21%) babies were premature expired within 48 hours.

DISCUSSION

In present study incidence of placenta previa was 12% while study conducted in India it is 37%.[3] Placenta previa is a major obstetrical challenge associated with fetal & maternal morbidity and mortality. Although etiology of placenta previa is speculated but there are several risk factors associated with it. These includes advance maternal age, multi parity, Previous abortion, Previous scar & previous history of placenta previa.[6] In present study 18 (47%) patients patient with placenta previa were in age group 31-35 years while study by Iffat Baloch Liaquat university hospital in 2019, it is 40% in age group 31-35 years.[7]

According to present study in Independent university hospital placenta previa was 65.7% in P2-4 while a study conducted in India it is 73.5% in grand multi para.[7] Our results are also comparable to study conducted in Khyber teaching hospital Peshawar where majority of patients were above 35 years of age and are grand multipara.[8,9]

Now a days obstetricians should be prepared to face the placenta previa and acreta because cesarean section rates is increasing. The current study showed that the risk of placenta previa is proportionally increasing in patients having previous cesarean sections. Which is consistent with study in General hospital Lahore.[10,11] One study conducted in 2008 by Solheim etal showed that if cesarean section rate continue to rise than in 2020 cesarean delivery will be 46.2% & there will be additional 3728 cases of placenta previa and this is true as in present days.[13]

The current study showed that all patients with placenta previa received blood transfusions and 10.5% Patients required ICU care. The study conducted in Gulberga Medical College in 2016, the blood transfusions was needed in 58% of cases.[3]

In present study cesarean Hysterectomy has to done in 36.8% of patients with placenta previa and uncontrolled Hemorrhage while study by Omstock showed that cesarean Hysterectomy with placenta previa and scar uterus is 16% as compared to un scared uterus which is 3.6%.[14] In previous studies the most common indication for cesarean hysterectomy was uterine atony[15] while in recent studies the most common indication for cesarean hysterectomy is placenta previa.[8]

In current study during surgery 5.2% patients got bladder injuries due to placenta accrete and in 1 patient 2.6%, we have to do cesarean hysterectomy later on. The study in India shows that in 1.7% (3) patients cesarean hysterectomy has to done later on.[7]

The present study regarding neonatal outcome was relatively good as 47.3% neonates required no resuscitation, 31.5% required NICU admissions and 21% babies expired within 48 hours. These results were comparable with study by Devarmani et al.

CONCLUSION

In our study the incidence of placenta previa is high which is due to the increase rate of cesarean deliveries. The most common indication now

a days for cesarean hysterectomy is placenta previa. The morbidity due to placenta previa was high incidence of blood transfusion and obstetrical hysterectomy. These can be reduced by early diagnosis in antenatal period by Ultrasonography before it becomes symptomatic. This can be achieved by better spacing in pregnancies, limitation of family size & early referral of high risk pregnancies to tertiary care hospital where 24 hours emergencies, NICU facilities, Blood Bank, expertise are available as team work. These measures will definitely help in better fetal & maternal outcome.

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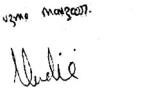
1	Uzma Manzoor	Study design, Study collection and interpretation manuscript writing, Literature review.	
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