ORIGINAL ARTICLE

MATERNAL AND FOETAL OUTCOME IN CESAREAN HYSTERECTOMIES PERFORMED FOR PLACENTA INCRETA

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Background: Placenta accreta is a serious obstetrical complication and is currently a very important indication for peripartum hysterectomy. The purpose of this study is to review the frequency of Caesarean hysterectomies performed for placenta accreta and maternal, foetal outcome of these patient. **Methods**: In this cross-sectional study all the patients who underwent emergency hysterectomies for different obstetrical indications during this one year were included in this study. Among them the hysterectomies performed for massive antepartum haemorrhage due to placenta increta were reviewed in detail and risk factors were identified. **Results**: Caesarean hysterectomies performed for different obstetrical indications were 47 and 10 were due to placenta previa increta (21.2%). The mean age of the patients was 30±5.5 years. Majority of the patients were multigravidas between 26 and 35 years of age. 30% of patients were Para-3 and 70% of patients were Para–4 and above. One patient (10%) had previous one Caesarean section with placenta previa increta, 02 patients (20%) had previous 02 C-Sections and low-lying placenta adherent to it and 04 patients (40%) had previous 03 C-Sections and major degree placenta previa and 03 patients (30%) had 04 C-Sections with placenta increta. Among the foetal outcome 04 babies (40%) were delivered between 28–32 weeks of gestation. Five foetuses (50%) were delivered between 33–36 weeks of gestation and one foetus (10%) was delivered at term. 02 babies delivered at 28 weeks of gestation had early neonatal death due to prematurity. There were no maternal deaths in this time period. **Conclusion**: placenta previa increta is a major obstetrical complication. Timely recognition and delivery in a tertiary care hospital with surgical expertise, blood bank facilities and intensive care facilities both for the mother and the baby are needed to improve maternal and foetal outcome.

Keywords: Placenta previa; Placenta accrete; Placenta increta; Hysterectomy, Maternal mortality; Maternal morbidity

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INTRODUCTION

Placenta previa is defined as placenta which is implanted partially or completely in the lower segment of the uterus. It is now classified as major degree placenta previa in which placenta covers the internal cervical Os completely and minor degree placenta previa in which placenta is sited in the lower segment of the uterus but does not cover the Os.[1] Increasing maternal age and parity are one of the risk factors for low lying placenta.[2] History of dilatation and curettage and manual removal of retained placenta increase the risk of placenta previa in the future pregnancy. Previous history of myomectomy is also a risk factor but increasing Caesarean Section rate is most important factor causing high incidence of placenta previa and placenta previa increta.[3]

When placenta implants in the area of the previous scar in the uterus, the villi of placenta penetrate deeply into the myometrium, a condition called placenta previa increta. Maternal and foetal morbidity and mortality are very high in such patients and put an excessive burden on health care facilities.[4] The aim of this study is to review the frequency of Caesarean hysterectomies performed for placenta increta over one-year period and to assess maternal and foetal outcome.

MATERIAL AND METHODS

This descriptive cross section study was conducted in Gynae-A Unit Ayub Teaching Hospital, Abbottabad, over a period of one year from January till December 2017. All the patients who underwent emergency hysterectomies during this one year were included in this study and among them the patients who had hysterectomies due to placenta previa increta were selected for review. At admission detailed history was taken including the age, menstrual history, obstetrical history, any complication in the present pregnancy, the booking status of the patient including the total number of Antenatal visits in the present pregnancy, the clinical presentation at the time of the admission and details of the risk factors for placenta previa were taken. Thorough general physical examination was performed followed by systemic and per abdomen examination. Expert ultrasound scan including Doppler ultrasound was performed

to confirm the diagnosis of placenta increta. Baseline investigations were performed and blood bank services were availed for the arrangement of the blood. All the details were entered into a proforma and a data was analysed by using SPSS version 16.

RESULTS

Total number of the admissions in the unit in this time period were 6818. Total number of obstetrical admissions were 3470. Among them 1500 patients had vaginal deliveries and 1300 patients had Caesarean Sections for different obstetrical indications. Forty-seven patients had emergency hysterectomies due to variable indications and among them 10 had hysterectomies due to placenta previa increta and massive haemorrhage 21.2%.

Table-1: Total number of emergency hysterectomies performed in one year = 47

Indications	Total number of patients
Ruptured Uterus	17
Placental Abruption	12
Placenta Increta	10
Uterine Atony	08

Table-2: Age of the patients undergoing hysterectomies for Placenta Previa Increta

Ages	Total number of patients	Percentage
20–25	01	10
26–30	04	40
31–35	04	40
36–40	01	10

Table-3: The parity of the patients with emergency hysterectomies performed for Placenta Previa Increta

Parity	Number of Patients	Percentage
Para-3	03	30
Para-4	05	50
Para-5	02	20

Table-4: Number of the previous C-Sections in emergency hysterectomies performed for Placenta Previa Increta

Number of the C-Sections	Number of the patients	Percentage
Previous 1 C-Section	01	10
Previous 2 C-Section	02	20
Previous 3 C-Section	04	4
Previous 4 C-Section	03	30

Table-5: Period of gestation of foetuses in patients undergoing emergency Hysterectomies for placenta previa increta

Period of gestation	Number of the foetuses	Percentage
28–32 weeks	04	40
33–36 weeks	05	50
37–40 weeks	01	10

DISCUSSION

In the majority of the patients with low lying placenta the underlying cause is unknown and condition is considered to be an accident of nature, but it is known that any condition which damages the decidua will lead to placenta previa in the future pregnancy.[5,6] Increasing maternal age and parity lead to the increased incidence of placenta previa. Previous history of dilatation and curettage, manual removal of retained placenta and uterine exploration for retained products of conception or puerperal pyrexia, all damage the endometrium and increase the risk of placenta previa in next pregnancy.[7–10]

Increasing C-Section rate is one of the most important risk factors for placenta previa increta now a days. Clark *et al* observed an increased incidence of placenta previa after C-Section from 0.26% in women with normal uterus to 0.65% after one and up–to 10% after 04 or more C-Section.[11] 75% of the morbidly adherent placenta are associated with placenta previa. In the presence of both the risk factors i.e., placenta previa and previous C-Section obstetrician must have high index of clinical suspicion for placenta increta. All of our patients with morbidly adherent placenta had one or more C-Sections.[12,13]

Morbidly adherent placenta is associated with maternal and foetal morbidity and mortality which include massive obstetric haemorrhage, DIC, need for emergency hysterectomy, bladder and ureteric injuries, ARD's and acute tubular necrosis.[14]

In the view of the rising incidence of the placenta previa increta in the patients with previous C-Section timely Antenatal diagnosis is important. Ultrasound scan including colour Doppler and MRI play an important role in the diagnosis in Antenatal period. Colour Doppler ultrasound will also help to diagnose placenta increta and bladder involvement.[15–19]

In the recognition of high morbidity and mortality associated with placenta previa increta a multi-disciplinary approach is recommended. Expert Sonologist, interventional radiologist, the Anaesthetist, Haematologist, Neonatologist and experienced consultant's obstetrician has a crucial role to play. Particular attention is needed in the management of massive haemorrhage including availability of fresh blood, packed cells, platelets, fresh frozen plasma and cryoprecipitate.

The most important factor during the management of these patients is not to remove placenta before hysterectomy. Timely antenatal diagnosis, planned Caesarean Hysterectomy without attempts to remove placenta is a lifesaving procedure for the patient. Attempts to remove the placenta will lead to massive hemorrhage.[20–22]

Traditionally hysterectomy has been considered the surgical option of choice for the patient with antepartum haemorrhage due to placenta previa increta but recently there have been attempts of conservative management to preserve fertility in those patients whose families are not complete. The option includes leaving the placenta after Caesarean delivery with surgical uterine devascularization, embolization of the uterine vessels, uterine compression sutures and over sewing of placental vascular bed.[23,24]

CONCLUSION

Placenta Increta is a high-risk obstetrical condition. Its incidence is increasing with increasing age, parity and rising incidence of Caesarean Section. It needs to be identified timely in antenatal period and patient needs to be managed in a tertiary care facility with maternal and foetal intensive care facilities.

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