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Maternal Outcome after Conservative Management of "Placenta Accreta"

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ABSTRACT

Objective: To find out maternal outcome after conservative management of "placenta accreta" **Study design:** Case series. **Place and Duration of Study:** Allied Hospital, Faisalabad from 1st July 2006 to 30th June 2015. **Material & Methods:** 22 patients with placenta accreta, where fertility was desired were selected for conservative management. Patient who were hemodynamically unstable after delivery of the fetus due to massive hemorrhage or those who presented with prolonged rupture of membrane were excluded from study. **Results:** Conservative management was successful in 19 (86.36%) patients in terms of uterine conservation. However, 03 (13.64%) patients developed PPH and 02 (9.09%) developed postpartum endometritis. Hysterectomy was done in 03 (13.64%) patients. No mortality took place. **Conclusion:** Conservative management of placenta accreta is a reasonable option in selected cases where fertility is desired. However, it requires regular follow-up till complete resorption or expulsion of placenta. **Key words:** Placenta accreta, conservative management, success rate.

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INTRODUCTION

Placenta accreta results from abnormal invasion of the placenta into the substance of the uterus. It is thought to be due to an absence or deficiency of Nitabuch's layer of the decidua as a result of failure of reconstruction of decidua basalis after repair of caesarean incision or any other surgical procedure done over the uterus. Depending on the extent of invasion of the placenta, the condtion is classified as placenta accreta (reaching the myometrium), placenta increta (into the myometrium) and placenta percreta (to breach the serosa or beyond)[1].

In the literature, the term "placenta accreta" is often used as a general term to describe all three conditions[2]. The incidence of placenta accreta has increased markedly over the last 2-3 decades and now occurs with a frequency of 1 per 2500 deliveries[3].

The high incidence is due to rise in caesarean section rate, surgical evacuation of the uterus, multiparity and increased maternal age.

It has been suggested that the rarest form placenta percreta represent 5-7% of all abnormal placentations[4]. Placenta percreta is associated with a maternal mortality as high as 10% and significant maternal mobidity[5].

The optimal management of placenta accreta is debatable. The extirpative approach, consisting in forcible manual removal of the placenta is associated with massive hemorrhage and emergency hysterectomy. Therefore, this option should be abandoned[6-7]. The most common approach is caesarean hysterectomy, with no attempt to detach the placenta[2]. However, hysterectomy leads to loss of fertility and is associated with significant morbidity.

Recently, there are studies of conservative management of placenta accreta thereby maintaining fertility and potentially minimizing complications. A large multicenter study showed

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that this conservative treatment preserved the uterus in 78.4% of women with a severe maternal morbidity rate of only 6%[8].

In conservative management after delivery of fetus, placenta is left in place and patient is observed for resorption or expulsion of placenta. Meanwhile, patient is monitored for any complication like secondary PPH or endometritis. Methotrexate was used in past but now its routine use in conservative management is no longer advocated[9].

The main reason for choosing conservative management was to preserve fertility and minimize morbidity. The aim of this study was to see the maternal outcome after conservative management. The main outcome measures were PPH, postpartum endometritis and the need for hysterectomy.

MATERIALS & METHODS

This study was conducted at Allied Hospital, Faisalabad in Gynae & Obst Department from 1st July 2006 to 30th June 2015. Allied Hospital, Faisalabad is a tertiary care hospital having a large catchment area. All patients who had already been diagnosed as placenta accreta during antenatal period or previously undiagnosed cases encountered during caesarean section or after delivery, where fertility was desired were included in study. Patient who were hemodynamically unstable after delivery of the fetus due to massive hemorrhage or those who presented with prolonged rupture of membrane (rupture of membrane for more than 24 hours) were excluded from study. In antenatal period, diagnosis was made by gray scale ultrasonography and color Doppler ultrasonography. After delivery if there was failure to deliver the placenta inspite of active management of 3rd stage of labour, placena was left as such, manual removal of placenta was not attempted, emergency ultrasonography was done to diagnose placenta accreta. So after taking detailed obstetric history, fertility desires and counseling of the patient regarding the outcome and followup, informed consent was taken and patient was enrolled for study. Mostly those were patients who were admitted for an elective repeat LSCS. So after getting all baseline investigations, anemia was corrected and planned caesarean section wad done after 37 completed weeks after administrating 02 doses of Betamethasone. After delivery of the fetus placenta was left in situ. Broad spectrum antibiotics were administered for 2 weeks. Patient was kept in hospital under observation for 2 weeks to see any sign or symptom of endometritis or PPH. Serum Beta HCG was done weekly for 2 weeks. Patient was discharged after 2 weeks and called for follow-up with fortnightly serum Beta HCG and ultrasonography. This follow-up was continued until placenta was completely resolved or patient developed normal menstruation.

RESULTS

Table 1: Success & failure rate

	Numbers	Percentage
Uterine conservation (Success)	19	86.36
Hysterectomy (Failure)	03	13.64

Table 2: Mode of delivery

	Numbers	Percentage
Vaginal	05	22.73
Abdominal	17	77.27

Table 3: Risk / Associated factors

	Numbers	Percentage
Previous LSCS	16	72.73
Previous ERPC	03	13.64
Breech presentation/ uterine anomaly	03	13.64

Table 4: Complications

	Numbers	Percentage
Postpartum hemorrhage	03	13.64
Postpartum endometritis	02	9.09

Table 5: Parity status

	Numbers	Percentage
Para 1	5	22.73
Para 2	10	45.45
Para 3	7	31.82

Conservative treatment was successful in 19 patients (86.36%). However, 03 (13.64%) patients developed postpartum hemorrhage and emergency hysterectomy was done. In 03 patients, placenta accreta was encountered during LSCS due to breech presentation and all of the 03 patients were primigravida. In 01 patient ,there was uterine septum while the other 02 had no uterine anomaly. Spontaneous placental resorption took place in 15 (68.18%) patients while placental expulsion took place in 07 (31.82) patients. In 16 (72.73%) patients complete placenta was left in situ while in 06 (27.27%) patients partial placenta was left. Among the 22 patients 05 patients were referred form private sector after vaginal delivery or caesarean section with failure to deliver the placenta because of morbid adherence. These patients were markedly anemic and multiple blood transfusions were given to them. Later on, 02 (9.09%) patients developed postpartum endometritis and secondary PPH. So secondary hysterectomy was done.

DISCUSSION

Conservative management of placenta accreta was first described by Arulkumaran et al. in 1986 where systemic methotrexate 50 mg as an intravenous infusion (total dose 250 mg) was administered on alternate days and the placental mass was expelled on day 11 postanatally[10]. Current management does not recommend the routine use of methotrexate because it leads to rapid disintegration of placenta leaving behind a large placental area, which is a potential site for infection or secondary PPH.

There are limited studies on conservative management. Mostly there are case reports. Minakshi Rohilla reported conservative management in 04 cases which was successful in all cases[11].

A systematic review reported expectant management resulted in secondary hysterectomy in 55/287 (19%), maternal mortality in 1/295 (0.3%), subsequent menstruation in 44/49 (90%) and a subsequent pregnancy in 24/36 (67%)[12]. In our study the hysterectomy rate is (19%) comparable to this study but there was no mortality in our study. Although, majority of patients 17 (77.27%) in our study were multiparous, but either they had no alive issue or only one alive issue so they were interested to preserve their fertility.

The diagnosis of placenta accreta is important especially in patients with risk factors to plan delivery or caesarean section at tertiary care hospital with multidisciplinary approach which requires the availability of senior obstetrician, senior anesthetist and availability of multiple blood transfusions. We received 06 patients from private sector where delivery or caesarean section was conducted which resulted in massive intra-operative hemorrhage. Although no mortality took place but 02 patients underwent secondary postpartum and hysterectomy.

In our study it is noted that 03 patients had placenta accreta without any previous surgery or risk factor for adherent placenta. However, they had malpresentation and underwent LSCS due to breech presentation. Since all of 03 were primgravida so fertility was desired. This association of adherent placenta with malpresentation or uterine anomaly requires study on a large scale.

CONCLUSION

Invasive placentation presents significant challenge at LSCS even for highly skilled surgeon. Management is a team work with multi-disciplinary approach to minimize morbidity. Conservative management of placenta accreta in selected cases where there is desire to preserve fertility is a reasonable option with good success rate, but requires follow-up to deal with potentially life threatening condition like secondary PPH or endometritis. However, if such complication develops, hysterectomy should not be delayed.

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