Management of Placenta Previa with Accreta: A Case Series in Public Tertiary Care Hospital

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Abstract

Placenta previa with accreta is a rare cause of major obstetric hemorrhage resulting in maternal morbidity and mortality. A case series of 08 patients of placenta previa with accreta presented at Abbasi Shaheed hospital Gynecology unit 1 during January 2018 to December 2018. Seven (07) patients were delivered by Caesarean Section and one vaginally. In 05 patients placenta was left in situ and injection methotrexate was given. Removal of placenta during Lower Segment Caesarean Section (LSCS) and bilateral internal iliac artery ligation was done in 02 cases. Febrile illness occurred in 02 patients. One patient required laparotomy on fifteenth postoperative day due to uterine scar dehiscence. Two cases required obstetrical hysterectomy due to torrential hemorrhage. Conservative management in women with placenta previa with accreta has proven to be successful in carefully selected cases at tertiary care hospital with multi-disciplinary team.

Keywords: Placenta previa, placenta accreta, caesarean section, ultrasonography..

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Introduction

Placenta previa with placenta accreta spectrum is a life threatening obstetric complication leading to torrential maternal haemorrhage requiring multiple blood transfusion, maternal morbidity and mortality[1]. Placenta accreta is the most common indications for emergency peripartum hystrectomy[2]. The risk factors associated with placenta accreta are advance maternal age, multiparity, increase in the rate of caesarean section, uterine surgery and infections[3]. The incidence has increased from 0.03 to 0.3% in studies from the last two decades, highest incidence 0.9% has reported in a recent study[4]. A high index of suspicion is required for diagnosis and greyscale as well as colour Doppler ultrasonographic features suggestive of accreta must be sought in cases with risk factors[5]. MRI is also effective but expensive in prenatal diagnosis where ultrasound findings are inconclusive[6].

Management of placenta accretas pectrum ranges from conservative methods to extirpative management[7]. Conservative management can be successful and preserve fertility[8]. Conservative methods involve uterine conservation with leaving placenta in situ and adjuvant treatment of methotrexate injection or internal iliac artery ligation[9]. The complications associated with accrete could be torrential haemorrhage, injury to bladder, bowel, massive transfusion, renal failure, DIC (disseminated intravascular coagulation) and maternal death[10]. In our country uterus is given a lot of importance and if a woman loses her uterus at a younger age, the husband gets an opportunity to marry someone else as his wife has lost her womanhood. The woman herself feels devastated and depressed. In light of this, we planned conservative management of such patients whenever possible. The aim of this study was to identify the cases of placenta previa

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with accreta with our clinical acumen,greyscale and colour Doppler ultrasonography; once diagnosis was confirmed, whenever possible leaving placenta in situ and to conserve uterus with or without bilateral internal iliac ligation.

Case 1

A female about 33 years old, 3rd gravida was admitted with 35 weeks pregnancy and previous two caesarean section with vaginal bleeding. She was diagnosed placenta previa with accreta on Doppler ultrasonography. Lower uterine segment was very thin and covered by engorged blood vessels at operation. Placenta was completely covering os and adherent to uterus no active bleeding so placenta was left in situ. Only two doses of intramuscular methotrexate injection 50 mg was given with folinic acid rescue. Patient developed bone marrow suppression after 1 week of methotrexate therapy; she developed fever and stomatitis. She was shifted to medical ICU where GCSF (granulocyte colony stimulating factor) was given; during this period patient expelled out placental pieces. Patient was discharged in stable condition after 28 days. The placenta was completely expelled, confirmed by ultrasound.

Case 2

A 35 years patient P3+2, previous 03 caesarean sections was admitted for elective section at 37 weeks of pregnancy with major placenta previa and partial accreta on Doppler ultrasound. During surgery placenta separated partially except few focal areas of accreta during surgery. Uterine packing was done to secure hemostasis. Estimated blood loss was 1500 cc. About 04 units of whole blood and 2 units of FFP (fresh frozen plasma) transfused. Patient was discharged on 7th post operativeday in stable condition.

Case 3

A 26 years primigravida was referred from private hospital, 12 hours back after delivery with retained placenta. The patient was vitally stable and there was no vaginal bleeding. Her symphysiofundal height was 20 cm, internal cervical os was open and placenta was felt. Her Doppler ultrasound revealed placenta accreta. Single dose of methotrexate injection 50 mg was given intramuscularly. Placenta was expelled in pieces. Patient was discharged on 7th postoperative day in stable condition with follow up weekly. Ultrasound was doneafter 1 month revealed an empty uterus.

Case 4

A 34 years female was referred by private hospital at 37 weeks pregnancy with previous two LSCS after opening abdomen. As soon as the obstetrician noticed huge vessels on uterus and bladder, she immediately abandoned the procedure, packed abdomen, stitched her and referred her. At Abbasi Shaheed hospital, she was re-opened, large engorged vessels on lower segment of uterus and bladder was seen and urinary bladder was found adherent to the uterus. We delivered the foetus through Classical incision. The placenta was partially separated so we removed it. Few placental pieces which were adherent to the uterus were left in situ. Uterine packing and internal iliac artery ligation was done. Single dose of injection Methotrexate 50 mg was given. Uterine Pack was removed after 24 hours. Placental pieces expelled completely after 15 days, confirmed on ultrasound .

Case 5

A 36 years patient was admitted for elective caesarean section due to 37 weeks pregnancy with placenta previa and accreta and previous caesarean section. Placenta accreta was diagnosed on ultrasound. Intra operatively lower uterine segment was congested and hyper vascular, completely covering internal os. Placenta was partially separated during delivery except some focal areas. Remaining placenta removed manually. Uterine packing and internal iliac artery ligation was done to secure hemostasis. Estimated blood loss during surgery was 1000 cc, 02 units of whole blood was trans-

fused. Patient was discharged in stable condition on 10th postoperative day.

Case 6

A 35 years patient, gravida 2, par 1+0, admitted for Elective caesarean section due to previous one LSCS and Placenta previa with accreta on ultrasound. During surgery placenta was found adherent completely and no active bleeding so left in situ. Postoperatively two doses of injection MTX (methotrexate) IM (intra muscular) were given 48 hours apart with folinic acid rescue. Patient was discharged after one week. She was readmitted in emergency on 15th postoperative day with high grade fever and abdominal pain. At laparotomy Caesarean section scar had sloughed and placental tissue was found protruding from incision. The placenta was easily removed and uterus closed back. Patient discharged in stable condition after one week.

Case 7

A 28 year old female, 2nd gravida, Para 1+0, last delivered by caesarean section. She was diagnosed as placenta previa with accreta at 34 weeks on ultrasound and MRI. She presented in emergency with vaginal bleeding. Her emergency caesarean section was done followed by subtotal hysterectomy due to torrential haemorrhage. About 04 units of whole blood and 04 units of FFP were transfused. Patient was discharged in stable condition after one week.

Case 8

A 30 years old, Para 4 + 0, admitted for elective cesarean section due to previous four LSCS and placenta previa with accreta on Doppler ultrasound. Classical Caesarean section was done. Placenta was partially detached and torrential haemorrhage ensued. Obstetrical hysterectomy was performed. She required eight units of whole blood transfusions, 04 FFP and two units of platelets. There were no post-operative complications. She was discharged from hospital on 8th post-op day in a stable condition.

Discussion

The above case series though small is suggestive that uterine conservation is possible in selective cases of Placenta previa with accreta, which are managed in a tertiary care setup. Cesarean section and advance maternal age are the most important risk factors associated with Placenta previa and accreta, also seen in our case series. Antenatal imaging greyscale ultrasound, colour flow Doppler and MRI can establish a diagnosis. In our case series Doppler ultrasound made diagnosis in 7patients. Antenatal diagnosis allow for planned delivery, involving multidisplinary team, counselling regarding surgical approach to delivery, preparation for hysterectomy if necessary, as well as arrangement of blood products and other supporting therapies[6]. Management in other cases has varied including prophylactic or therapeutic uterine artery embolization orinternal iliac artery ligation at the same time as initial surgery and some being treated with methotrexate following delivery. But there have been risk of sepsis, secondary haemorrhage necessitating hysterectomy[9]. In our case series women with placenta prervia and accrete required internal iliac artery ligation followed by methotrexate treatment. However, two of our patients developed fever, the cause in one was side effect of methotrexate (leucopenia) and in other was caesarean scar dehiscence, one required prolong stay in ICU and the other required laparotomy. Out of eight patients with Placenta previa with accreta, uterus was saved in six patients. In two cases obstetrical hysterectomy has performed because of torrential haemorrhage. Conservative management has proven to be successful in carefully selected cases at tertiary care hospital with multi-disciplinary team.

Conclusion

In conclusion conservative methods of management, leaving placenta in Situ, bilateral internal iliac

artery ligation, uterine packing with adjuvant treatment of methotrexate has proven to be successful in carefully selected cases at tertiary care hospital with multi-disciplinary team.

Conflict of Interests

Authors have no conflict of interests and received no grant/funding from any organization.

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Answer of Picture Quiz

Ameloblastoma (Aggressive type)

Odontogenic keratocyst

Odontogenic myxoma

Central giant cell granuloma

Brown's tumor of hyperparathyroidism