

ORIGINAL RESEARCH PAPER

Obstetrics & Gynecology

A RARE CASE REPORT OF AN UNDIAGNOSED FOCAL PLACENTA ACCRETA IN A PRIMIPARA

KEY WORDS: focal accreta, accreta, retained placenta, hysterotomy

Dr. Gouri A. Keni*	Junior Resident Department of Obstetrics and Gynecology, Government Medical College and Hospital, Aurangabad-431001, Maharashtra, India*Corresponding Author
Dr. Vijay Y. Kalyankar	Associate Professor Department of Obstetrics and Gynecology, Government Medical College and Hospital, Aurangabad-431001, Maharashtra, India
Dr. Shrinivas Gadappa	Professor and Head Department of Obstetrics and Gynecology, Government Medical College and Hospital, Aurangabad-431001, Maharashtra, India
Dr. Priyanka Thorat	Junior Resident Department of Obstetrics and Gynecology, Government Medical College and Hospital, Aurangabad-431001, Maharashtra, India

BSTRACT

Focal Placenta Accreta presents as a life threatening complication of "Retained" placenta. There are various modalities of management of this condition, both medical and surgical. We present a case report of an 18 year old primipara who had preterm vaginal delivery with retained placenta which was diagnosed on postpartum Ultrasonography and Magnetic Resonance Imaging as placenta accreta. We managed the case surgically by Manual removal of placenta which failed. So, hysterotomy with placental removal was done. This is rarely considered as a treatment modality. Hysterectomy was thus avoided preserving future fertility in a primiparous patient.

Introduction -

Placenta Accreta is a histopathological term □rst de □ned by Irving and Hertig in 1937, as the "abnormal adherence of the afterbirth in whole or in parts to the underlying uterine wall in the partial or complete absence of decidua"(1). Depending on the depth of villous tissue invasiveness, placenta accreta was subsequently subdivided by modern pathologists into 'creta' or 'adherenta' where the villi adheres super□cially to the myometrium without interposing decidua; 'increta' where the villi penetrate deeply into the uterine myometrium down to the serosa; and 'percreta' where the villous tissue perforates through the entire uterine wall and may invade the surrounding pelvic organs, such as the bladder. Cases of placenta accreta are also often subdivided into total, partial or focal according to the amount of placental tissue involved and the different depths of accreta placentation have been found to co-exist in the same case(11). Thus, placenta accreta is a spectrum disorder ranging from abnormally adherent to deeply invasive placental tissue. The incidence of placenta accreta is 1 in 2500 according to Shinder, S et al. (2)

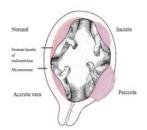


Fig. 1. Types of placenta accreta by degree of invasion.

Case report

A 19 year old Primigravida was referred to our Tertiary care centre with 34.6 weeks of gestational age with complaints of leaking PV since 22 hours. Patient had an anomaly scan suggestive of multi-cystic dysplastic kidney of the baby with oligohydramnios.

Patient was vitally stable, afebrile. Obstetric examination uterus size 34 to 36 weeks, uterus relaxed and fetal heart sounds $136/\min$. Cervix was 1 finger loose dilation and 20 - 30 % effacement with membranes absent and station -1 pelvis adequate in latent labour. Induction of labour was done with

PgE2 gel 0.5 mg intra-cervically. Patient had preterm vaginal delivery in 5 hours. Baby was admitted in NICU for multicystic dysplastic kidney. Active management of third stage of labour was done. Placenta did not expel even with intravenous 40 IU oxytocin for 1 hour. Patient was then taken up for manual removal of placenta in the OT under General anaesthesia. Some part of placental tissue could be removed but major portion was retained but there was no active bleeding PV. Patient was put on antibiotic coverage. Ultrasound suggested 5.5 x 6 x 9 cm of echo complex lesions with focal thinning of myometrium of thickness 1.1 cm in fundic region. Confirmatory MRI Abdomen with pelvis suggestive of retained placenta with thinning of myometrium on right fundus with placenta accreta. Patient complained of bleeding PV after 36 hours with passage of clots with fever. Hysterotomy done under General anaesthesia, Intraoperative findings showed on external appearance, right cornual attached placenta with increased vascularity and thinning of myometrium at right cornu. The placenta was removed through the hysterotomy incision. The adherence of placenta at the right cornu was clearly felt by us while removing it. Bleeding occurred for some time from the cornu, was seen at incision of Hysterotomy, that stopped with pressure on the thinned out right cornu. This was suggestive of penetration of placenta. Manual removal of placenta from vagina was not attempted here. Massive transfusion protocol was given. Histopathology revealed multiple fragmented brownish tissue pieces largest tissue piece of size 8 x 7 x 4 cm. No umbilical cord identified. On larger tissue pieces foetal surface identified. Section shows placental tissue with increased syncytial knots and micro infarcts. The histopathology report could not show features of focal placenta accreta as uterine tissue was not sent for histopathology. However clinically there was difficulty and adherence of placenta appreciated by the surgeon during its surgical removal. She recovered well postoperatively and was discharged.

Discussion

As demonstrated by our case, it is possible to have placenta accreta go undiagnosed leading to devastating maternal and fetal complications. Predisposing factors aside from previous caesarean sections include all previous myometrial damage from myomectomy, manual removal of the placenta, complicated uterine curettage, and leiomyomas, septic

endometritis, and multiparity or idiopathic in some cases. (6) The development of placenta accreta spectrum has been reported in women with no surgical history but presenting with a uterine pathology, such as bicornuate uterus, adenomyosis, submucous Droids and myotonic dystrophy (2). In our case a cornual attachment of placenta accrete was noticed, however with none of the underlying precipitating causes mentioned above. Hence being a rare finding.

Antenatal diagnosis of placenta accreta spectrum is crucial in planning its management and has been shown to reduce maternal morbidity and mortality. (8)

Ultrasound at experienced hands is an effective investigation to detect placenta accreta both prenatally and in postnatal period. MRI may be used to complement ultrasound imaging. Both USG and MRI revealed accreta in our case. Ultrasonography is sufficient to diagnose placenta accreta, with a sensitivity of 77–87% and specificity of 96–98%.(4) "Moth-eaten" or "Swiss cheese" appearance is seen typically. Turbulent lacunar blood flow is the most common finding of placenta accreta spectrum on colour flow Doppler imaging.

Maternal complications in placenta accreta spectrum are primarily the result of massive hemorrhage.(2) Median estimated blood loss in cases of placenta accreta spectrum ranges from 2000 to 7800 ml and the median number of units of blood transfused is 5 units. Our case required massive transfusion protocol with 4:4:4 Packed Red Blood Cells: Random Donor Platlet:Fresh Frozen Plasma. In the setting of severe haemorrhage, hysterectomy may be necessary as a lifesaving intervention; despite aggressive surgical intervention, maternal death rates in placenta accreta have been reported as high as 7%(3). Women with placenta accreta face a range of complications, including acute respiratory distress syndrome, disseminated coagulation, transfusion-related complications, injury to ureters, bladder or bowel, emergency hysterectomy and death.

Use of methotrexate in the conservative management of placenta accreta is questionable. Manual removal of placenta can be used in case of partial adherent placenta but remains ineffective usually. Manual Removal of Placenta also remained ineffective in our case.

The ACOG recommends planned, preterm caesarean section hysterectomy with the placenta left in situ as removal of a placenta accreta spectrum is associated with signi□cant haemorrhagic morbidity. In case of unsuspected placenta accreta spectrum diagnosed after the birth of the baby, the placenta should be left in situ and an emergency hysterectomy performed. Planned delivery at 35 to 37 weeks is recommended[9]. Our case presented in spontaneous preterm PROM.

When the extent of the placenta accreta is limited in depth and surface area, and the entire placental implantation area is accessible and visible, uterus preserving surgery may be appropriate. The choice of surgical technique will depend on the position of the placenta, the depth of invasion, and the parametrial extension of the placenta accreta spectrum as assessed by ultrasound and/or MRI before delivery, the visual assessment of the uterus at the time of surgery and the presenting clinical symptoms, i.e. bleeding or no bleeding As in our case of Focal accreta no specific guidelines are available for management. Minimally invasive surgeries like hysterotomy and partial myometrial resection can be attempted based on the depth of invasion.

CONCLUSION:

Primiparous Focal Placenta Accreta is a very rare finding, Focal Accreta can offer a reasonable chance for conservative management. Imaging studies like Ultrasonography and Magnetic Resonance Imaging are helpful to diagnose focal placenta accrete. We could manage our case conservatively by avoiding the prescribed invasive management of hysterectomy or partial myometrial resection by doing hysterotomy and placental removal thereby successfully preserving the future fertility in a primipara

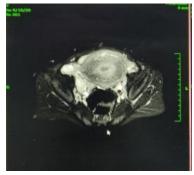


Figure 2.1 Magnetic Resonance Imaging Axial view of pelvis



Figure 2.2 Magnetic Resonance Imaging Sagittal view of pelvis showing placental invasion in myometrium.

REFERENCES:

- Irving C, Hertig AT. A study of placenta accreta. Surgery, Gynecol Obstet. 1937;64:178–200.
- O'Brien JM, Barton JR, Donaldson ES. The management of placenta percreta: conservative and operative strategies. American journal of obstetrics and gynecology. 1996;175(6).
- Miller DA, Chollet JA, Goodwin TM. Clinical risk factors for placenta previa placenta accreta. American journal of obstetrics and gynecology. 1997;177(1). 7. Wu S, Kocherginsky M, Hibbard JU. Abnormal placentation: Twenty-year analysis. American journal of obstetrics and gynecology. 2005;192(5):1458-1461.
- Warshak CR, Eskander R, Hull AD, et al. Accuracy of ultrasonography and magnetic resonance imaging in the diagnosis of placenta accreta. Obstetrics and gynecology. 2006;108(3 Pt 1). (USG)
- Silver RM, Landon MB, Rouse DJ, et al. Maternal morbidity associated with multiple repeat cesarean deliveries. Obstet Gynecol 2006;107:1226–32.
- Hung TH, Shau WY, Hsieh CC, et al. Risk factors for placenta accreta. Obstet
 Gynecol 1999:93:545–50.
- Gynecol 1999;93:545–50.

 7. ACOG. "Placenta accreta". Committee Opinion No. 529. American College of Obstetricians and Gynecologists. Obstet Gynecology 2012;120:207–11.
- RCOG Green-Top Guidelines no 126 eE6 of e48 2018; Royal College of Obstetricians and Gynaecologists, 2018.
- RCOG Green-Top Guideline; No. 126 e27 of e48 a 2018; Royal College of Obstetricians and Gynaecologists, 2018.
- Royal College of Obstetricians and Gynaecologists. (2018) Green-top Guideline, No. 126. e22 of e48 a 2018. Royal College of Obstetricians and Gynaecologists
- Fox, H., & Sebire, N. (2007). Pathology of the placenta. (3rd ed) (pp. 1–16, 80 84). Elsevier Limited; 2007:1-16, 80 84.