

Medical Management Of Placenta Accreta In A Primipara Following Vaginal Delivery

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Abstract:

The incidence of placenta accreta, a potentially life-threatening obstetric condition has increased over the years. Women at greatest risk of placenta accreta are those who have myometrial damage caused by a previous cesarean delivery. Morbidly adherent placenta in the absence of risk factors is a rare entity in primigravida, and its conservative management becomes important in such patients to preserve future fertility. Here we present a case of placenta accreta in a primigravida with no known risk factors.

The diagnosis was made following delivery where attempted, failed manual removal of placenta raised suspicion due lack of plane of separation between placenta and uterus. Diagnosis was confirmed by MRI and medical management with methotrexate was successfully done.

Weekly follow-ups with clinical evaluation, serum beta Human Chorionic Gonadotropin, CBC, LFT and creatinine levels were done. Also two weekly imageries were done to look for placental morphological changes and vascularity.

Keywords: Placenta accreta, Medical management, Methotrexate.

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I. Introduction

Accreta placenta spectrum is a complex obstetrical condition of abnormal placental invasion associated with severe maternal morbidity.¹ The complications may include severe postpartum hemorrhage, uterine perforation, shock, infection, loss of fertility and even death.

High risk of morbidly adherent placenta increased during past years. Their management is controversial. Cesarean hysterectomy, considered the gold standard treatment by American Society, is associated with high risk of maternal morbimortality. Conservative management has been sought to reduce maternal morbidity associated with caesarean hysterectomy while maintaining fertility⁶

However, considering a low successful uterine preservation rate and a high maternal complication rate, primary cesarean hysterectomy should be used as the treatment of choice for mild to severe abnormally invasive placenta. Conservative management should be reserved for women with a strong fertility desire and women with extensive disease that precludes primary hysterectomy due to surgical difficulty.⁷

Here we present a case of placenta accreta in a primipara with no known risk factors for abnormal placentation. The diagnosis was made following delivery where a failed attempted manual removal raised suspicion due lack of plane of separation between placenta and uterus. Diagnosis was confirmed by MRI and successful medical management with methotrexate was done considering primipara status.

II. Case Report

A 25 years old primigravida presented to the clinic at 27 weeks of pregnancy for routine antenatal care. She was a low risk pregnancy so far in the course of her uneventful pregnancy journey. Her USG at 23 weeks done with the previous obstetrician showed placenta as fundoposterior, away from internal os with a raised uterine artery PI of 1.59 (99% percentile, pathological) in the right uterine artery and 1.3 (94 percentile borderline) in the left uterine artery. The cervical length was 3.51 cm with no other significant observations. The patient was on

Tab Ecosprin 75 mg twice a day in view of raised PI as a predictor of preeclampsia and abnormal placental function. The other complications such as IUGR and preterm labour were discussed with the patient and her accompanying family. Rare complications such as abnormal implantation of placenta and placenta accreta were suggested but not taken very seriously into account in view of first conception within 2 years of marriage and absence of potential risk factors for abnormal placentation. The only significant medical history was a single episode of PID after marriage. The PID was managed uneventfully before conception. There was no significant surgical or family history.

The antenatal period progressed well and pregnancy was monitored with DFMC and fortnightly USG with Doppler which assured and allowed continuation of pregnancy. Ecosprin was discontinued at 36 weeks. Patient was planned for induction of labour at 37 weeks due to early Doppler changes. However the patient missed her further scheduled ANC visit and induction plan and waited for a spontaneous labour. She presented at 39 weeks 6 days with spontaneous labour at midnight. She informed that she has continued Tab Ecosprin 150mg daily fearing compromise to fetus as she was waiting for spontaneous labour.

Labour progressed well under supervision and a full term healthy female baby was delivered. Active management of the third stage was done.

However, there were no signs of placental separation. There was no PPH. The patient's vitals were within range. The uterus was well contracted.

Inj prostadin was given 250mcg to help placental separation. Since the vitals were stable, after waiting for about 30 minutes manual removal was attempted. However, no plane of separation between uterus and placenta could be appreciated.

On abdominal examination, uterus was 18 to 20 weeks gravid size and well contracted. She was put on broad spectrum anti-biotics. After informed consent, patient was taken to operation theater and MRP was attempted again. Placenta was adherent to the posterior surface of uterus and no plane could be appreciated. The procedure was abandoned as vitals were stable and hysterectomy was not an option considering her primipara status. The vitals were still within limits postpartum. MRI was planned for the next day and patient was shifted to postpartum ward for observation.

Ultrasound with Doppler imaging of uterus showed, diffuse intraparenchymal placental lacunar flow, thinning of myometrium overlying the placenta, loss of retroplacental 'sonolucent line'. Magnetic resonance imaging (MRI) confirmed the diagnosis of placenta percreta. After informed consent, we administered methotrexate intramuscularly in the doses of 1 mg per meter square weekly (total 4 doses) and monitored with β -hCG, leucocyte counts and LFT. Patient was followed weekly with ultrasound Doppler which showed gradual decrease in vascularity of placenta. Two months after methotrexate treatment there was significant decrease in vascularity of the placental mass with liquefaction under the serosal surface. Placental mass gradually shifted towards the mucosa.

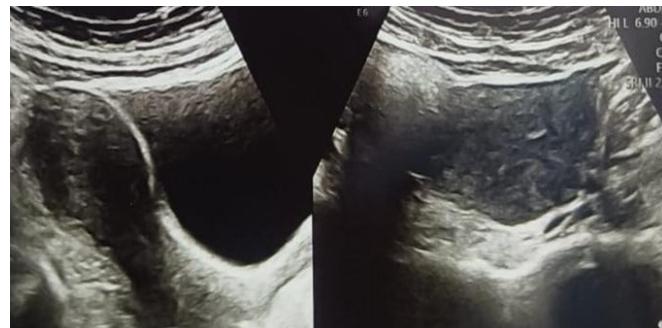


Postpartum Imaging Suggestive Of Placenta Percreta

Patient was followed weekly with ultrasound Doppler and serum beta-hCG. There was one episode of bleeding per vaginum two days after third dose with passage of fleshy mass; however, patient was stable and did not require any blood transfusion.

The fourth dose was given as scheduled.

Two months after initiation of methotrexate treatment patient had near normal ultrasound findings and b-hCG value of less than 5 mIU/ml. Retained placenta had totally resolved leaving calcific focus at the placental site. Patient resumed her work in 6month postpartum.



Ultrasound Done Eight Months Postpartum-Site Of Placenta Percreta Marked By Calcified Spot

Compliance with Ethical Standards Conflict of interest

The author declares that there has been no conflicts of interest.

About the author:



The author is presently working as an Assistant Professor at BS Kushwaha Medical college and Research Centre. She has worked in the department of Reproductive medicine for a period of five years at Regency Healthcare in Kanpur and specializes in management of infertility, recurrent pregnancy losses and high risk obstetrics. She is a designated member of World Association of Laparoscopic Surgeons (WALS), Indian Association of Gynaecological Endoscopy (IAGE), Indian Society for Assisted Reproduction (ISAR) and Kanpur Obstetrics and Gynaecological Society (KOGS). She is an excellent teacher. She is a dynamic orator and a diligent clinician.

Informed Consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

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