



AN OBSTETRIC CHALLENGE: A CASE OF PLACENTA PERCRETA WITH THROMBOCYTOPENIA WITH PORTAL HYPERTENSION

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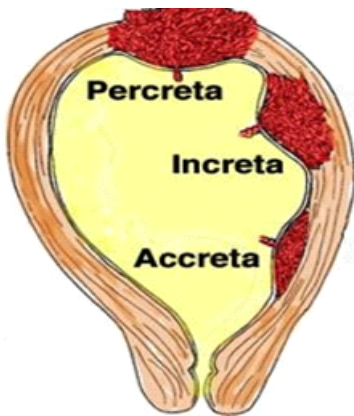
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INTRODUCTION

Placenta percreta is a condition in which the placenta abnormally penetrates entirely through the myometrium and entirely through the serosa. This might be complicated by attachment of placenta to surrounding structures such as urinary bladder or rectum. Placenta percreta is a potentially life threatening obstetric condition that requires a multidisciplinary approach.

Based on histological degree of placental invasion into the myometrium there are 3 main entities- accrete, increta, percreta. In placenta accreta, placenta is attached to the myometrium due to partial or complete absence of decidua basalis. Placenta increta occurs when the placenta partially invades the myometrium. Placenta percreta is further invasion of the placenta beyond the myometrium upto the uterine serosa and gets attached to a surrounding structure.

The increased incidence of placenta percreta seems to parallel the increasing caesarean delivery rate. Placenta percreta is one of the most serious complications of placenta previa and is frequently associated with severe obstetric hemorrhage usually necessitating hysterectomy.



CASE DETAILS

32 year old G2P1L2 with previous LSCS in view of twin pregnancy 2 years back presented at 35 weeks of gestation with pain in abdomen. Patient is also a known case of portal hypertension and oesophageal varices with splenomegaly with thrombocytopenia. Patient had thrombocytopenia in last pregnancy and gives history of platelets transfusion. Also at 12 weeks of gestation she underwent variceal banding operation.

On admission her lab reports were- Hb-10.2; WBC-7,800; platelets-40,000 PT(INR)- 13.5(1.04). Her USG was suggestive of Anterior Placenta Previa, with no evidence of obvious myometrial invasion. And USG abdo showed splenomegaly. But as the placenta was anterior we did her MRI which showed complete Placenta Previa with focal areas of severe myometrial thinning and myometrial interruptions along antero-inferior wall of uterus with placental tissue closely abutting anterior abdominal wall suggestive of placenta percreta.

After all these investigations were done we posted her for elective classical section and obstetric hysterectomy. Pre operatively we



transfused 4 pints of platelets as patient had thrombocytopenia. N also kept adequate blood ready as hemorrhage is the deadliest complication associated with placenta percreta.

Patient underwent classical caesarean section with obstetric hysterectomy with bilateral internal iliac arteries ligation and urinary bladder wall repair. Patient had approximately 5 litres blood loss intra-operatively. Volume replacement was done by giving blood products - 7 pints of PCV, 6 platelets, 6 FFPs. Patient was admitted in ICU for 3 post op days, thereafter, on vitals being stable patient was shifted to ward.

DISCUSSION:

Placenta percreta is the rarest form of placental abnormalities (7% of pathologically adherent placenta). In placenta percreta, the decidua basalis is partially or completely absent, and the chorionic villi invade the entire myometrium up to the serosa. The increasing incidence of placenta percreta may be associated with the increased rate of caesarean deliveries. Other predisposing factors include: complicated uterine curettage, manual removal of the placenta, and myomectomy. Placenta percreta may present in the antenatal period with intraperitoneal or intravesical bleeding. Intraperitoneal bleeding mimics placental abruption or uterine rupture. Gray-scale ultrasound and color Doppler imaging are the first-line imaging modalities for the diagnosis of placenta accreta.

MRI is used as an adjunct tool when sonographic examination is equivocal or when the placenta cannot be reliably visualized on sonography. The 2D ultrasound criteria for the diagnosis of placenta accreta in at-risk patients are obliteration of the retroplacental echolucent zone, abnormal prominent placental lacunae and thinning or disruption of the hyperechoic uterine serosa-bladder interface. MRI may show signs of abnormal placentation as defined by thinning, indistinctness of the myometrium, loss of the thin T2 dark uteroplacental interface, irregular thick intraplacental T2 dark bands (result of fibrin deposition), marked placental heterogeneity, and bulging of the lower uterine segment. Caesarean hysterectomy is recommended in the case of lifethreatening severe hemorrhage. Conservative management may be an option in order to prevent peripartum hysterectomy and to preserve fertility, as long as bleeding remains minimal.

Leaving the placenta in situ undisturbed is a consideration with administration of prophylactic antibiotic and prophylactic postpartum oxytocics. There appears to be no universal agreement on the requirement for methotrexate when the placenta is retained; although it may hasten the resolution of placenta. But in this case. Patient already had thrombocytopenia so we couldn't think of giving methotrexate. Follow-up to ensure the resolution of

placental tissue is done with a combination of clinical assessment, ultrasound examination and serial serum β -hCG assay. If the area of accreta is focal and the majority of the placenta has been removed, then a wedge resection of the area can be performed. Evidence suggests that bilateral uterine artery embolization is less likely to be successful in cases of abnormal placentations. Planning for delivery should involve a team including a maternal fetal specialist, an anesthesiologist, a urologist, a hematologist, an interventional radiologist, and a pelvic surgeon to optimize patient outcome. Delivery should be done in a specialized tertiary center with adequate resources, including those for massive transfusion anticipating need for hysterectomy.

CONCLUSION

Placenta percreta is a potentially life threatening obstetric condition that requires a multidisciplinary approach. The increased incidence of placenta percreta seems to parallel the increasing caesarean delivery rate. Diagnosis of placenta percreta before delivery allows multidisciplinary planning in an attempt to minimize potential maternal or neonatal morbidity and mortality. Magnetic Resonance Imaging is helpful for diagnosis of placenta percreta. In general, the recommended management of suspected placenta percreta is a planned preterm caesarean hysterectomy with the placenta left in situ because attempts at removal of the placenta are associated with significant hemorrhagic morbidity. Preferred treatment modality is obstetric hysterectomy as placenta left in situ can lead to infection or may lead to trophoblastic disease later in life.

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