

Case Report

Placenta Previa, Percreta – A Case Report of Successful Management

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Abstract:

Background: Placenta percreta is a rare complication of pregnancy and is associated with significant postpartum hemorrhage. Incidence of morbid adherent placenta has dramatically increased due to increasing caesarean section rate all over the world. Placenta percreta is the most severe form of morbid adherent placenta. It frequently results in maternal morbidity and mortality which is mainly caused by massive obstetric

hemorrhage emergency hysterectomy. Majority of these cases are seen in patient with history of previous LSCS with anterior low lying placenta. Here we present a case of placenta in lower segment with percreta in a women with H/O previous 2 C/S with large fibroid in fundus.

Key Word: Placenta percreta, Morbid adherent placenta, Hysterectomy.

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Introduction:

Placenta accreta refers to a placenta that is abnormally adherent to the uterus.¹ There are three main entities (accreta, increta, percreta), which is defined by histological degree of placental invasion into myometrium.¹ It is also known as placenta accreta spectrum (PAS). Complete or partial absence of decidua basalis leads to abnormal invasion of the chorionic villi into the myometrium. Placenta percreta is the rarest and most dangerous form, because of its propensity to cause life threatening hemorrhage.

The incidence of placenta percreta increases due to increasing rate of caesarean delivery.² The other risk factors are placenta previa, artificial reproductive techniques, previous history of placenta accreta and previous uterine procedure such as curettages. The placenta accreta spectrum is usually seen in the lower uterine segment scars. After surgery, the scarring process leads to abnormal vascularization and secondary hypoxia, leading to defective decidualization and abnormal trophoblastic invasion.

Mostly it is asymptomatic, antenatally it is diagnosed by the absence of uterine serosa-bladder interface on ultrasound and increased placental vascularity (placental lakes) on colour doppler.^{2,3} MRI is done if ultrasound report is inconclusive to rule out bladder bowel involvement. A multi disciplinary approach is needed for the optimization of maternal outcomes. A planned caesarean section with obstetric hysterectomy reduce maternal morbidity and mortality. Conservative management can also be tried but the rate of secondary hysterectomy is usually high due series of life threatening complication, like post partum hemorrhage, sepsis, deep vein thrombosis, pulmonary thrombo-embolism, septic shock, fistulas etc. We, here by, present a case of placenta previa percreta with large

fibroid uterus diagnosed by ultrasonogram and doppler study and managed by total abdominal hysterectomy.

Case Report:

Mrs. Shefali Akter 34 yrs. old Para-2(C/S)+1, Gravida-4th ALC-6 years attended at her 7 weeks pregnancy in a private chamber with slight lower abdominal pain with known case of fibroid uterus. She had an incomplete abortion 1 year back and D&C was done in a private clinic. On general examination she is quite ok and P/A/E revealed uterus is 16 weeks size and all other investigations were normal. USG shows 8 weeks alive pregnancy with large fibroid (93x83cm) in postero fundal region. Blood sugar and thyroid functions were normal. Blood group was AB(+ve). She had regular antenatal checkup and then anomaly scan at 20 weeks showed fibroid uterus with low lying placenta. At her 33 weeks of pregnancy USG showed central placenta previa with posterior extension with possible placental invasion. Doppler shows vascularity with fibroid uterus in posterior fundal wall. Patient was advised to get admitted at 36 weeks of pregnancy with plan for elective caesarean section. Patient was made aware of the possible obstetric complications and was counselled that she may need hysterectomy with ICU facility with at least 10unit of fresh blood. On the scheduled day of delivery, 7 unit blood was made ready to transfuse. Expert anaesthesiologist and expert assistant were called for the case and excess instrument was taken. Then abdomen was opened by longitudinal incision. After opening the abdomen multiple large vessels present in the lower segment under the bladder and bladder was high up. Initial displacement of the bladder was performed and subsequently a transverse incision was made above the lower uterine segment in order to avoid placental bed. A healthy male baby was delivered weighing 3kg. To minimize blood loss uterine margin was hold by sponge holding forcep. Placenta was central in position occupying the whole lower segment anteriorly and posteriorly. Urgent decision of hysterectomy was taken. Total abdominal hysterectomy was done keeping placenta in situ. Then abdomen was closed in layers keeping a drain tube in situ. Total per operative blood loss was minimal and 2 unit blood was transfused during operation and 3 unit blood was transfused post operatively. Postoperative period was uneventful and patient was discharged on 3rd postoperative day in good condition. The specimen was sent for histopathological examination which reveals placental villi was extending deeply into the myometrium upto serosa in the lower segment suggestive of placenta percreta in the lower segment. Some area of lower segment was breached by the placenta.

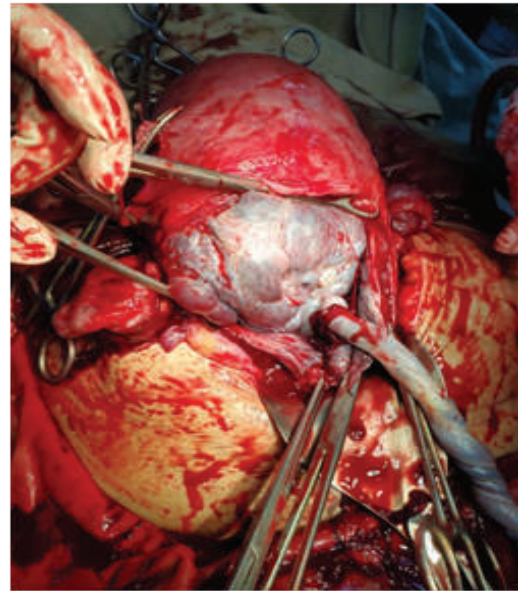


Fig-1: After delivery of the baby

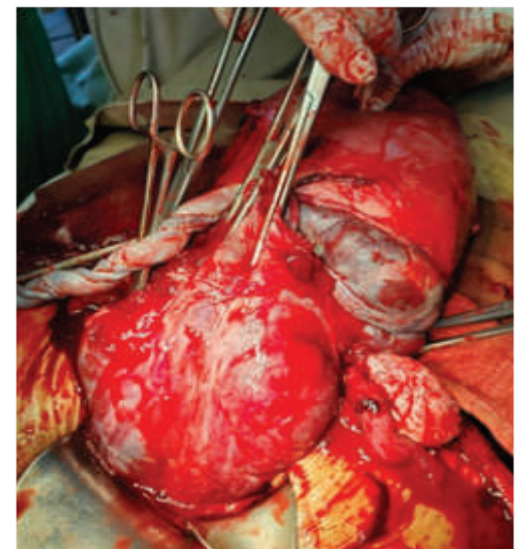


Fig-2: Lower segment anteriorly

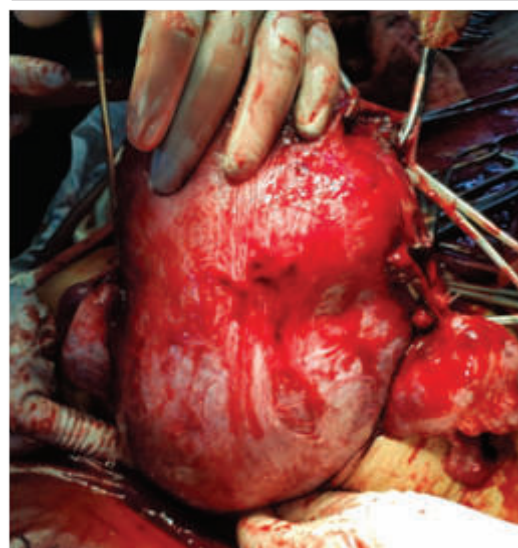


Fig-3: Lower segment posteriorly

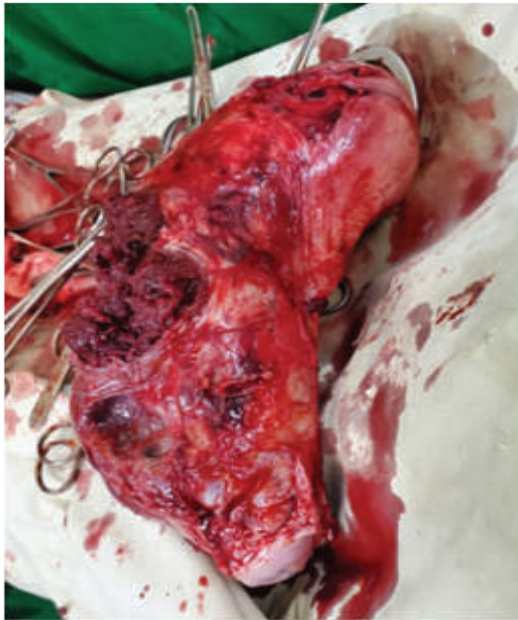


Fig-4: Uterus with placenta in-situ

Discussion:

When the placental villi are partially or completely attached to the underlying myometrium, it is termed placenta accreta. It occurs as a result of a defect in the decidua basalis or defective development of the decidua basalis layer resulting in an abnormal invasion of the placenta. The term morbidly adherent placenta includes superficial invasion (accreta), myometrial invasion (incretta) and serosal invasion (percreta). The incidence of placenta accreta has increased tenfold in the past fifty years due to the increasing number of caesarean section and maternal age. It now occurs with the approximate frequency one in two thousand five hundred deliveries.^{3,4} The frequency of PAS increased with an increasing number of caesarean deliveries as follows-1st caesarean birth-3%, 2nd caesarean birth-11%, 3rd caesarean birth-40%, 4th caesarean birth 61%.⁵ Though rare it is now an important cause of maternal morbidity and mortality. It is one of the leading causes of peripartum hysterectomy. Patient with previous caesarean sections and an antepartum diagnosis of placenta previa are at the highest risk of placenta accreta. Other risk factors include previous uterine surgery like curettage, myomectomy, submucous fibroid, uterine anomalies and Asherman syndrome. Women with previous caesarean scar found to have a placenta previa or an anterior placenta underlying the scar and must undergo additional diagnostic imaging to confirm or exclude placenta accreta.

Placental lacunae (which appear as intraplacental sonolucent space) and disruption of interface between the bladder wall-uterine serosa (bladder line) are the most reliable

diagnostic sonographic findings. Colour Doppler demonstrating turbulent (chaotic) flow and/or bridging vessels are valuable confirmatory findings. If the ultrasound studies are inconclusive or ambiguous, magnetic resonance imaging (MRI) may be performed to clarify the diagnosis.⁶ Diagnosis is confirmed by histopathology. Postpartum histological findings show placental villi anchored directly on or invading into or through the myometrium, without any intervening decidua. Elevated level of maternal serum creatinine kinase, alpha-fetoprotein, and beta-hCG have also been reported with placenta accreta.^{7,8}

The treatment of placenta percreta is primarily surgical with hysterectomy being the treatment of choice. With an expected placenta percreta, planned delivery at a tertiary care facility between 34-37 weeks is desirable with availability of a multidisciplinary team.⁹ Classical caesarean section (with no attempt to placental removal) with hysterectomy is the treatment of choice, provided that future fertility is not a concern. In case if future fertility is desired after extensive counselling, conservative management may be tried. Conservative management is desirable in rare cases which includes leaving the placenta in situ, uterine or internal iliac artery ligation and transcatheter arterial embolization have also been tried. Postoperative administration of Methotrexate and arterial embolization has been tried in many patients to prevent bleeding and infection but is not always successful. Placenta in situ either undergoes spontaneous resorption or expulsion, which may take up to several weeks. Serious complications may occur which includes DIC, uterine necrosis, fistula, peritonitis, sepsis, septic shock, acute renal failure, pulmonary edema, deep vein thrombophlebitis or pulmonary embolism and death. A multidisciplinary team approach is relevant in managing these patients to reduce morbidity and mortality.

Conclusion:

Placenta percreta is a potential life-threatening condition for both mother and baby. This incidence is on the rise due to the increasing number of caesarean deliveries. Here doctors should be more careful and have a genuine rationale for the performance of caesarean section. As antenatal suspicion and diagnosis can be life-saving for a patient, therefore clinicians and radiologists should be more vigilant. Preoperative preparation including surgical and radiological expertise, blood components for transfusion and appropriate equipment will improve the maternal and fetal outcome.

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