

Case Report

A CASE OF PLACENTA PERCRETA IN A POST-CAESAREAN PATIENT WITH SCAR RUPTURE AT 30 WEEKS OF PREGNANCY – MANAGEMENT

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ABSTRACT

Placenta percreta is the most dreadful form of placental accreta syndrome. It is a variant of placenta accreta in which chorionic villi penetrates the entire thickness of the myometrium through the uterine serosa and may involve the adjacent structures. A 31 years old second gravida with previous one LUCS came to GOPD at 30 weeks POG with C/O mild lower abdominal pain. She was already diagnosed with placenta percreta at USG FPP of 12 weeks 6days. Despite all the risks and possibilities counselled during first diagnosis, she wanted to continue the pregnancy. At 30 weeks of POG with mild lower abdominal pain, she was admitted with a plan to continue the pregnancy till 34weeks under strict monitoring. But on the third day of admission, the intensity of lower abdominal pain increased with increased supra-pubic tenderness with clinical signs of impending scar rupture. Patient was taken for immediate intervention. During OT, it was diagnosed as a case of scar rupture with placental tissue popping out. Baby delivered by classical section, followed by bilateral internal iliac artery ligation and peripartum hysterectomy. Internal iliac ligation prior to hysterectomy reduced intra-operative blood loss, improving the maternal outcome and decreasing the maternal morbidity.

Keywords: obstetric hysterectomy, poft CS, placenta previa

CASE REPORT

A 31years old gravida two, para one with prior one cesarean section presented with complain of lower abdominal pain. She was a booked case of our hospital followed up for Ante-natal check-up. Her USG FPP of 12 weeks 6 days of gestation showed placental location at lower segment anteriorly and completely covering the internal os suggesting central placenta previa. There was also evidence of invasion of placenta into

anterior myometrium with loss of retro-placental hypo-echoic halo with impact on urinary bladder wall, sign of placenta percreta. Patient had been counselled about risks of continuing the pregnancy and emerging need of hysterectomy at any point of period of gestation. Still she wanted to continue with the pregnancy. Then, at 30 weeks patient presented at GOPD with mild lower abdominal pain. USG FPP shows AGA of fetus around 29weeks 4days and placenta in

anterior wall with grade II maturity with almost absence of myometrium at lower segment, suggestive of placenta percreta. Patient admitted with a plan of continuation of pregnancy until 34 weeks under strict in-patient supervision. Twice weekly USG FPP and daily CTG planned for the patient and she was kept under strict monitoring of vitals (pulse, BP, U/O, Hb- 8.4 gm/dL) and antenatal steroid dosage for fetal lung maturity started. But, on the third day of admission, the lower abdominal pain increased; on palpation, there was intense supra-pubic tenderness and the uterus found to be irritable. Patient had pulse around 124/min, BP - 100/70 mm Hg suggesting clinical signs of impending scar rupture. Patient shifted to OT immediately with 4 units pRBC in hand and operative procedure started under General Anesthesia. Abdomen opened with supra-umbilical vertical incision and 700 mL hemoperitoneum found mainly confined in front of previous lower segment caesarean scar. Upon removing the blood clots, scar dehiscence noted on lower uterine segment with placental mass popping out and invading the bladder seen. Girl baby of 1165 gms was delivered by breech extraction through midline vertical incision in upper segment of uterus. Baby handed over to neonatologist for further care and management. Maternal end of umbilical cord with placental mass kept in situ and the fundal incision repaired in single layer with vicryl 1-0 suture to reduce the blood loss. Trial for hysterectomy taken but torrential hemorrhage from the placental site obscured the field of surgery. Then, bilateral internal iliac artery ligation done and bilateral uterine cornu clamped, excised and ligated followed by obstetric hysterectomy is performed. Placental mass separated from bladder base as much as possible with fine dissection. Then, vault repaired in two layers. Drain placed in peritoneal cavity and abdomen closed in layers. Patient shifted to HDU for strict hemodynamic monitoring. 2 units pRBC transfused intra-operatively and 2 units pRBC transfused on post-operative day 1 and 2. Post-operative period was otherwise uneventful and patient was discharged on post-operative day 6. Baby discharged from neonatal unit after 15 days of hospital stay attaining body weight of 1.5 kgs. HPE revealed that the placental tissue

had invaded the entire uterine wall, confirming the diagnosis of placenta percreta.

DISCUSSION

Adherent placenta is one of the concerning situations which has a great potential to affect the health and life of the patient, if not managed well.

Its incidence is increasing day by day probably due to rise in the rate of caesarean section. ACOG estimated in 2002 that placenta accreta complicates around 1 in 2500 pregnancy, a tenfold rise in last 50 years.¹

As per ACOG recommendation, there are several management options for placenta percreta ranging from immediate salvage surgeries to expectant conservative managements discussed below;¹

a. When placenta accreta syndrome diagnosed first time intra-operatively, and the removal of placenta not possible in usual maneuvers; uterine incision should be closed immediately and decision for obstetric hysterectomy to be taken as early as possible.

b. *Expectant management -Methotrexate*, can be used for placental resorption.² Serial beta HCG monitoring, serial USG to look for placental volume and MRI may be used for monitoring the regression of placental mass. The biologic plausibility of this method is questionable as methotrexate targets rapidly dividing cells and division of 3rd trimester placental cells are limited. Also, methotrexate has the potential for maternal hematologic and nephrologic toxicities and is contraindicated in breast-feeding because of neonatal morbidity.^{3,4}

Some authors have left the placenta in situ without giving any agent for resorption, and the results are good. But there are high risks of associated complications like maternal sepsis, peritonitis, uterine necrosis, fistula, DVT/ PE, AKI etc. Nevertheless, in case of major haemorrhage, as in our case, there is no role of expectant management, and hysterectomy should be considered without delay to prevent major maternal complications or even maternal death.⁴

c. For expectantly managed patients with persistent placental tissue with or without substantial bleeding, *hysteroscopic resection of the placental remnants* has been proposed as an adjunctive

treatment.⁵ *High-intensity focused ultrasonography* has also been used in conjunction with hysteroscopic resection.⁶ The frequency of adverse events, and the proportion of patients who needed a repeat procedure, routine hysteroscopic resection with or without antecedent high-intensity focused ultrasonography is not recommended.

d. *Delayed interval hysterectomy* – it is another procedure for the expectant management of placenta accreta syndrome, specifically where future fertility is not a concern, and there is need for minimizing blood loss and tissue damage intra-operatively.^{7,8} But, here is also risks of adverse outcomes including DIC and septic shock, causing major concerns of maternal morbidity. Moreover, where there is torrential hemorrhage with slight handling of uterine tissue intra-operatively, there is no role of delayed hysterectomy.

e. *Future Fertility* - Expectant management of placenta accreta spectrum appears to have minimal effect on subsequent fertility but does carry a high recurrence risk of placenta accreta spectrum.⁹

CONCLUSION

The case of placenta increta in a post caesarean pregnancy diagnosed at first trimester continued till third trimester and then termination with good maternal and neonatal outcome is an interesting case. Though the placenta accreta syndrome has perspective of expectant management specially to avoid bladder and bowel injury, it has many drawbacks. Intra-operatively, ligating the bilateral internal iliac artery to secure hemostasis before proceeding for obstetric hysterectomy is a novel step for reducing intra-operative maternal blood loss and preventing morbidity. Hence, if future fertility is not a concern, concurrent hysterectomy with internal iliac ligation is the best option for decreasing maternal mortality and morbidity.

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FIGURES



Figure 1: Specimen of uterus with placenta percreta after obstetric hysterectomy

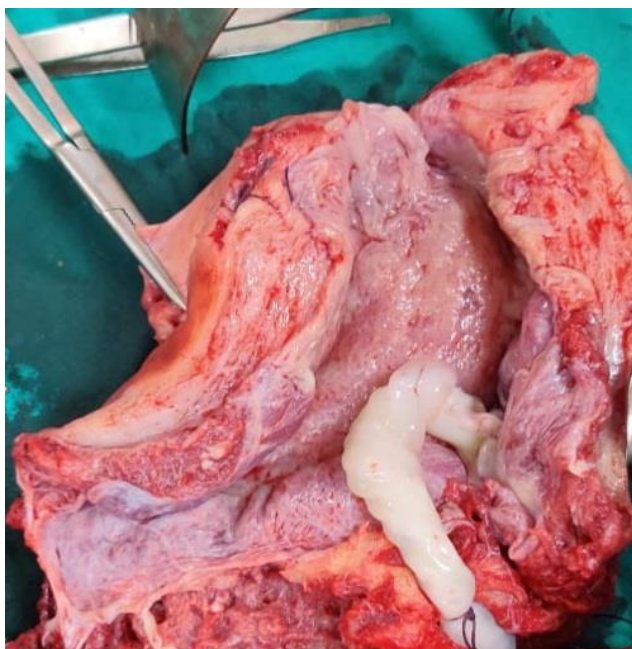


Figure 2: Cut open specimen of uterus after obstetric hysterectomy

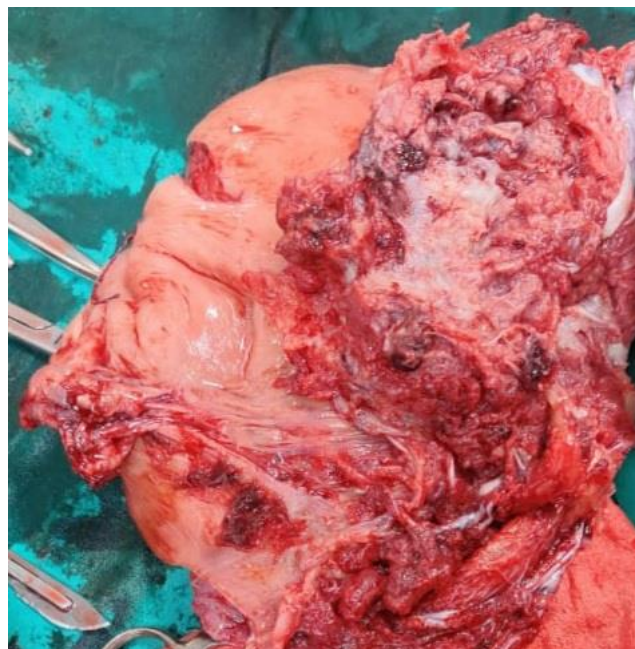


Figure 3: Specimen of uterus with placenta percreta invading the uterine wall all over

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