



Fundal Hysterotomy in Central Placenta Previa with Signs of Placenta Accreta Spectrum

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Abstract: Placenta previa associated with placenta accreta spectrum (PAS) is a high-risk obstetric condition associated with significant maternal and fetal morbidity and mortality. This study aims to report a case of complete placenta previa associated with placenta accreta spectrum managed at a tertiary referral hospital using a multidisciplinary approach. A 25-year-old woman with a history of a previous cesarean section was diagnosed during prenatal follow-up with progression from a low-lying placenta to complete placenta previa. Imaging studies demonstrated findings suggestive of placenta accreta spectrum. The patient was admitted at 37 weeks of gestation for a planned elective cesarean delivery. A fundal uterine incision (fundal hysterotomy) was performed to avoid placental disruption. During surgery, additional intervention was required because of left adnexal bleeding, leading to left salpingectomy and oophorectomy. The patient received blood transfusion and remained hemodynamically stable, with a favorable maternal outcome. This case highlights the importance of accurate prenatal diagnosis, meticulous surgical planning, and a multidisciplinary team approach in the management of placenta accreta spectrum, contributing to the reduction of complications and improved maternal outcomes.

Keywords: Placenta accrete spectrum (PAS), peripartum hysterectomy, obstetric high risk care

INTRODUCTION

Central placenta previa associated with placenta accreta spectrum (PAS) represents a severe obstetric condition, responsible for significant maternal and fetal morbidity and mortality [1] [2].

Early diagnosis and strict monitoring are essential to reduce intraoperative and postoperative risks, mainly due to the possibility of massive hemorrhage and the need for peripartum hysterectomy [2] [3].

This report describes the case of a pregnant woman admitted to a tertiary public hospital with radiologic findings compatible with placenta accreta, managed by a multidisciplinary team through elective cesarean section, fundal hysterotomy, and peripartum hysterectomy with the placenta left in situ [4].

Ethical Considerations

Patient's consent was formally obtained.

CASE REPORT

A 25-year-old female, with a history of previous cesarean section, underwent hybrid prenatal follow-up with appropriate laboratory screening and moderate gestational anemia (minimum Hb 10.1 g/dL), treated with oral and parenteral iron supplementation.

Serial ultrasound examinations during pregnancy showed a low-lying placenta, later evolving into central placenta previa. Magnetic resonance imaging (March 8, 2025) demonstrated subserosal hypervascularization and myometrial thinning, findings consistent with placenta accreta spectrum.

On March 11, 2025, the patient was admitted asymptomatic for planned cesarean delivery and hemodynamic monitoring. Physical examination determined BMI 37.6, BP 117/68 mmHg, HR 93 bpm, and uterine height 35 cm. Fetal monitoring demonstrated: Category I (tracing = NORMAL). Blood was cross-matched, and prophylactic antibiotics were administered.

On March 13, 2025, under spinal anesthesia, a fundal corporal hysterotomy was performed due to the presence of a central placenta previa covering the entire lower uterine segment, in order to allow fetal extraction without placental incision.

A subtotal peripartum hysterectomy with the placenta left in situ was performed because of placental accreta and completed parity-. During abdominal cavity inspection, an active bleeding hematoma was identified in the left adnexa, leading to left salpingectomy and oophorectomy.

The patient required transfusion of one unit of packed red blood cells intraoperatively. She remained hemodynamically stable, was admitted to the maternal ICU, and was later transferred to the ward in good condition.

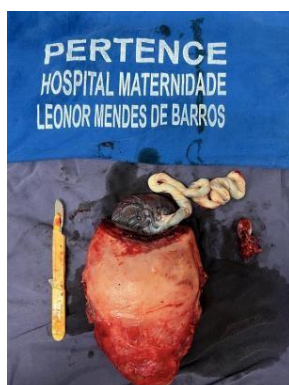


Figure 1: Macroscopic appearance of the surgical specimen (anterior view), showing total central placenta previa associated with features of placental accreta [4].



Figure 2: Macroscopic appearance of the surgical specimen (posterior view), showing the area of placental implantation consistent with placenta accreta [4].

DISCUSSION

The spectrum of abnormal placental adherence includes accreta, increta, and percreta. The main proposed pathophysiologic mechanism involves a defect at the endometrial-myometrial interface or a failure of decidualization in the area of a uterine scar, allowing abnormal trophoblastic invasion [5]. The major risk factors are placenta previa and previous cesarean section, with risk increasing progressively with the number of cesareans: 11% after one, 40% after two, and 61% after three procedures [6].

Magnetic resonance imaging offers approximately 80% sensitivity and specificity for diagnosis and should be performed after ultrasound findings suggest loss of the placenta-myometrium interface. [7] [8]. Early diagnosis allows for better surgical planning, reducing maternal morbidity and mortality [1] [9].

When the diagnosis of placenta accreta spectrum is strongly suspected, manual placental removal should be avoided, according to major obstetric consensus, as it significantly increases the risk of hemorrhage [10]. The best intraoperative approach consists of performing a hysterotomy away from the placenta, leaving it in situ, followed by peripartum hysterectomy – a strategy that decreases the risk of massive bleeding [10] [11].

In the described case, the fundal corporal incision was chosen because of complete coverage of the lower uterine segment, allowing fetal extraction without direct placental transection and minimizing immediate hemorrhage [11] [12]. However, this type of incision carries an increased risk of uterine rupture in future pregnancies [13].

Peripartum hysterectomy was indicated due to the confirmed placental accreta, ongoing bleeding [14], completed parity, and the patient's decision for definitive family planning—. A multidisciplinary approach, with blood bank preparation and experienced surgical teams, was crucial for a favorable outcome [1] [15].

CONCLUSION

The incidence of placenta accreta spectrum has increased eightfold since the 1970s, likely due to the rising number of cesarean deliveries. This case highlights the importance of detailed prenatal imaging, appropriate surgical route selection, thorough preparation, and

availability of an experienced multidisciplinary team. Individualized management enabled hemorrhage control and ensured a favorable maternal and neonatal prognosis.

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