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Abnormal Placentation with Placenta Accreta in a Post Ablation Pregnancy

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Introduction

Placenta accreta spectrum (PAS) is an abnormal trophoblastic invasion of the placenta into the myometrium of the uterus, which may extend beyond the uterine wall into other organs.¹ The maternal morbidity and mortality of PAS is high due to lifethreatening hemorrhage. Patients are more likely to require hysterectomy at time of delivery or postpartum.³ Risk factors for PAS include prior cesarean delivery, advanced maternal age, multiparity, prior uterine surgery or curettage, history of endometrial ablation and placenta previa.²⁻⁴ The prevalence rate of PAS is increasing and ranges from 0.01 – 1.1%.⁵ Endometrial ablation, a known risk factor for PAS, is a procedure used for abnormal uterine bleeding in premenopausal women, specifically heavy vaginal bleeding. Endometrial ablation destroys the functionalis layer of the endometrium, to the layer of the stratum basalis, which results in atrophy and fibrosis.⁶ In some cases, the functional endometrium may remain or regenerate⁶, allowing opportunity for pregnancy. It is important to educate patients on the importance of contraception after endometrial ablation as pregnancy post ablation is associated with significant complications such as ectopic pregnancy, spontaneous abortion, preterm delivery, intrauterine growth restriction, fetal anomalies and PAS.⁶ We present a patient with prior endometrial ablation who became pregnant and delivered at term with an undiagnosed placenta accreta requiring cesarean hysterectomy.

References



Abnormal Placentation with Placenta Accreta in a Post Ablation Pregnancy

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Case Description

38-year-old G1P0 at 37.0 weeks gestational age with history of chronic hypertension, gestational diabetes type 2, low-lying placenta and history of endometrial ablation with resumption of menses presented to Labor and Delivery with complaints of headache, vision changes and right upper quadrant pain. Blood pressure was 138/81 and labs were within normal limits, however due to headache unrelieved by multiple medications, patient met criteria for chronic hypertension with superimposed preeclampsia with severe features and was admitted for delivery. IV Magnesium was administered for seizure prophylaxis and induction was started. Patient induction course included Dinoprostone vaginal insert, Cook catheter and Pitocin augmentation. After 48 hours since start of induction, with cervical change only to 5cm dilation and prolonged exposure to IV Magnesium, decision was made to proceed with primary cesarean section. Cesarean section was complicated by uterine atony and intraoperative identification of placenta accreta requiring cesarean hysterectomy. The procedure was complicated by a postpartum hemorrhage of 2450 mL. Patient's postoperative hemoglobin on Day#1 was 10.3 from 12.5 preoperatively. All signs and symptoms of preeclampsia resolved postpartum. She was continued on IV Magnesium for 24 hours postpartum for continued seizure prophylaxis and started on Lovenox for a total of 6 weeks due to elevated risk of venous thromboembolism. Patient was discharged home in stable condition on POD#2.



Figure 1: Ultrasound image of left lateral low-lying posterior placenta 1.07 cm from internal cervical os on 32.4 week growth ultrasound

Endometrial ablation is becoming a more common, less invasive option for the premenopausal woman with heavy menstrual bleeding. It is important to counsel these patients that ablation is not a form of contraception. In this case, the patient had a known history of an endometrial ablation with resumption of menses as well as evidence of a low-lying placenta early in pregnancy. A history of endometrial ablation can greatly increase the risk for placenta accreta spectrum as it may be a precipitating factor to abnormal implantation and placentation secondary to endometrial scarring. ⁷ The importance of contraception must be emphasized as pregnancy complications are known to be severe. The estimated pregnancy rate after hysteroscopic endometrial ablation is low, estimated to be from 0.24 to 5.2%,⁸⁻¹⁰ however in this percentage of patients there is a high risk of associated complications during pregnancy. It is well known that a low-lying placenta and placenta previa may be associated with an increased risk of placenta accreta. ¹¹ Evidence of a low-lying placenta at an early gestational age in this patient may have been an early sign of abnormal placentation. Most pregnancies complicated by PAS require a cesarean hysterectomy at time of delivery which can increase risk of life-threatening hemorrhage, massive transfusion and maternal death. ¹²

PAS is associated with both high fetal and maternal morbidity and mortality. It is very important to counsel patients who desire endometrial ablation about the possibility of pregnancy without adequate contraception after endometrial ablation, along with the severe risks associated with a postablation pregnancy. It is also important to have a very high suspicion of PAS in pregnant patients with a history of endometrial ablation. Having a high clinical suspicion along with increased ability for antepartum diagnosis of PAS can lead to a significant decrease in severe maternal morbidity and decrease the likelihood of cases like the one described above.

Discussion

Conclusion



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Project title

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