Placenta Previa With Placenta Accreta Spectrum Leading to Emergency Obstetric Hysterectomy in a Multigravida at 30 Weeks Gestation: A Case Report

Dr Mamta Chandwani, Dr VB Bangal

Pravara Institute of Medical Sciences

Abstract:

Background:

Placenta previa is a major source of antepartum hemorrhage and is becoming more common since more women are having cesarean sections. When linked to placenta accreta spectrum (PAS), the syndrome presents a significant risk of substantial postpartum bleeding, frequently requiring immediate surgical intervention. Early antenatal diagnosis and a planned birth are essential for minimizing maternal morbidity; yet, unforeseen instances persist, especially among women receiving insufficient antenatal care.

Case Presentation:

We discuss the case of a 25-year-old multigravida (G3P2L2) with two prior cesarean sections, who arrived at 30 weeks and 1 day of gestation with sudden-onset, painless vaginal bleeding. A previous mid-trimester ultrasound indicated a low-lying placenta; however, the patient failed to attend subsequent follow-up appointments. When she got to the hospital, she had tachycardia, anemia, and no fetal heart sounds. Due to active bleeding from placenta previa, an emergency cesarean surgery was conducted. During the operation, a morbidly adherent placenta was found, which required an emergency obstetric hysterectomy and bilateral internal iliac artery ligation. The patient necessitated extensive blood component therapy and postoperative critical care, although made a satisfactory recovery.

Discussion:

This instance underscores the significant correlation between placenta previa, previous cesarean deliveries, and PAS. Emergency surgery was necessary since there was no prenatal surveillance, which is known to lead to more bleeding and illness.

Conclusion:

Early detection of PAS in placenta previa and the implementation of a planned multidisciplinary approach are crucial to avert life-threatening consequences.

Keywords:

Placenta previa; Placenta accreta spectrum; Emergency obstetric hysterectomy; Antepartum hemorrhage; Cesarean section.

Introduction:

Placenta previa is a severe obstetric disease characterized by the improper implantation of the placenta in the lower uterine segment, either partially or totally obstructing the internal cervical os. It is still one of the main causes of antepartum hemorrhage and is linked to high rates of illness and death in mothers and babies. (1) Placenta previa occurs in 0.3% to 0.5% of all pregnancies around the world. This number is going up, which is similar to how the number of cesarean deliveries is going up around the world. The condition usually shows up in the late second or third trimester as rapid, painless, bright crimson vaginal bleeding that might happen again and again and be hard to predict how bad it will be. (2) (3)

The pathogenesis of placenta previa entails impaired implantation and aberrant placental migration, especially in regions of uterine scarring or inadequate endometrial vascularization. Women who have had surgery on their uterus, especially a cesarean section, are at a much higher risk. (4) The risk of placenta previa rises with each cesarean delivery, and if placenta previa covers a preexisting uterine scar, the risk of poor placental adhesion goes up a lot. (5)

Placenta accreta spectrum (PAS) includes a group of illnesses in which the placental villi stick to the uterine wall in an unusual way because the decidua basalis is just partially or completely missing. (6) There are three types of PAS: placenta accreta, where villi attach directly to the myometrium; placenta increta, where villi infiltrate into the myometrium; and placenta percreta, when villi go through the myometrium and serosa and occasionally affect other organs. (7) PAS is a significant factor in severe obstetric bleeding and is among the most prevalent reasons for immediate peripartum hysterectomy. (8)

The simultaneous presence of placenta previa and PAS constitutes an exceptionally high-risk obstetric condition. Research has shown that having placenta previa and a history of previous cesarean sections is the biggest risk factor for PAS. (9) This combination greatly raises the chances of severe bleeding, disseminated intravascular coagulation, the need for a large blood transfusion, a protracted stay in intensive care, and death of the mother. Perinatal outcomes are negatively impacted, exhibiting elevated rates of preterm birth, fetal growth restriction, and intrauterine fetal mortality. (10)

Early antenatal diagnosis is crucial for enhancing outcomes in placenta previa and PAS. Ultrasonography, especially transvaginal ultrasonography with color Doppler, is the main way to diagnose, whereas magnetic resonance imaging is a helpful extra tool in some circumstances. (11) Antenatal recognition enables scheduled birth at a tertiary care facility, where a multidisciplinary team of obstetricians, anesthesiologists, interventional radiologists, neonatologists, and blood bank support is accessible. Planned cesarean hysterectomy at an acceptable gestational age considerably decreases maternal morbidity in comparison to emergency surgical intervention. (12) (13)

Even though imaging and management methods have gotten better, unexpected occurrences of PAS still happen, especially in places with few resources and among women who don't get enough prenatal care. These instances frequently manifest as obstetric crises characterized by life-threatening bleeding, requiring swift decision-making and extensive surgical treatments. (14) (15)

This case report is important because it shows how placenta previa worsened by PAS is still a problem in the midst of increased cesarean surgery rates. It emphasizes the necessity for diligent antenatal screening, patient adherence to follow-up protocols, and readiness for significant obstetric bleeding. This paper seeks to enhance early diagnosis, prompt referral, and better maternal outcomes by making people more aware of this high-risk illness and encouraging them to follow evidence-based care measures.

Case Presentation:

A 25-year-old woman, gravida 3 para 2 living 2, married for seven years, presented to the emergency obstetric unit at 30 weeks and 1 day of gestation with complaints of vaginal bleeding for the past 4–5 hours. The bleeding started suddenly, was brilliant red, and didn't hurt. There was no pain in the abdomen or contractions in the uterus. There was no prior history of trauma or sexual intercourse before the occurrence.

The patient had a notable obstetric history of two prior lower segment cesarean procedures. An abnormality scan conducted at 20 weeks of gestation indicated a low-lying placenta; however, the patient failed to attend future antenatal follow-up appointments, and no repeat ultrasound was conducted to evaluate placental migration or invasion. There was no previous occurrence of hypertension, diabetes mellitus, or other medical comorbidities in the current pregnancy.

The patient was awake and aware during the assessment, although they looked pale. Vital signs showed tachycardia, with a pulse rate of 120 beats per minute and a blood pressure of 100/60 mmHg. The oxygen saturation was 98% when breathing room air. The general examination revealed grade 2 pallor. An abdominal exam showed a uterus that was relaxed, in a longitudinal lay, and in a cephalic presentation, which is what you would expect at 30 weeks of pregnancy. There were no fetal heart sounds when we listened, which suggests that the fetus died in the uterus. During the speculum examination, active vaginal bleeding was observed. A vaginal examination was postponed due to suspected placenta previa.

The laboratory tests showed a hemoglobin level of 8.7 g/dL, but all the other blood and chemical tests were normal. Taking into account the patient's history of previous cesarean sections, ultrasound indications of a low-lying placenta, persistent vaginal bleeding, and hemodynamic instability, a diagnosis of bleeding placenta previa with suspected morbid placental adherence was determined. The patient was taken for an emergency lower segment cesarean section after being properly resuscitated and having blood products arranged.

During the operation, the placenta was found to be tightly attached to the lower uterine segment, which is a sign of placenta accreta spectrum. Efforts to separate the placenta led to significant bleeding. Due to uncontrollable bleeding, an emergency obstetric hysterectomy with bilateral internal iliac artery ligation was conducted. During the surgery, the patient got three pints of packed cell volume and four pints of fresh frozen plasma.

After the surgery, the patient was moved to the surgical intensive care unit, where they were intubated and put on volume-controlled assist-control mode. She got two pints of packed cell volume and four pints of random donor platelets in addition to the first transfusion. There were no problems during the postoperative phase. On the first day after surgery, she was taken off the ventilator. On the third day, she was moved to the ward, and on the eighth day, she was sent home in stable condition.

Discussion:

Placenta previa exacerbated by the placenta accreta spectrum (PAS) constitutes a significant challenge in contemporary obstetrics, due to its robust correlation with substantial obstetric bleeding, urgent surgical intervention, and heightened maternal morbidity. The current case illustrates the traditional high-risk trio of placenta previa, several previous cesarean procedures, and insufficient antenatal monitoring, resulting in an unforeseen diagnosis of morbidly attached placenta and the necessity for emergency obstetric hysterectomy.

In our case, the patient exhibited painless vaginal bleeding during the third trimester, a characteristic sign of placenta previa, aligning with the account by Joiya et al. (2024), who noted that placenta previa generally presents with painless bleeding resulting from placental detachment from the inadequately contractile lower uterine segment. The lack of uterine discomfort and contractions in our patient further corroborated this diagnosis and facilitated its clinical differentiation from placental abruption. Nevertheless, in contrast to other examples documented in the literature that occur nearer to term, our patient appeared preterm at 30 weeks' gestation, highlighting the unpredictability and severity of bleeding episodes linked to placenta previa. (16)

A significant element of this instance is the simultaneous occurrence of placenta previa and PAS, which is closely associated with prior cesarean deliveries. Parween et al. (2025) emphasized that the escalating prevalence of PAS is closely linked to the rising rates of lower segment cesarean sections, noting that all cases in their study had a previous cesarean history. Our patient had previously undergone two cesarean sections, significantly elevating her risk for aberrant placental invasion. The pathogenesis entails impaired decidualization at the scar site, facilitating aberrant invasion of placental villi into the myometrium. This process explains why we found a placenta that was very tightly attached to the uterus after surgery. (17)

The absence of consistent antenatal follow-up and repeated imaging during this pregnancy was crucial in necessitating emergency care. Loukopoulos et al. (2023) underscored that ultrasonography is the primary diagnostic modality for placenta accreta, while MRI offers significant insights into the depth of invasion. In our case, a low-lying placenta was detected at 20 weeks; nevertheless, the lack of monitoring of placental position and invasion during pregnancy led to a missed chance for a scheduled delivery. This is similar to what Garg et al. (2025) found: in low- and middle-income countries, PAS is often first detected at the time of delivery because of insufficient access to antenatal care, which can lead to life-threatening bleeding and emergency hysterectomy. (18)

Emergency surgical intervention in PAS is correlated with markedly inferior maternal outcomes relative to elective, scheduled cesarean hysterectomy. Flores-Mendoza et al. (2022) showed that emergency cesarean hysterectomy is associated with more blood loss, more coagulopathy, bladder injury, and a greater need for transfusions. Our patient similarly necessitated extensive blood component therapy and postoperative intensive care support, corroborating the outcomes of this investigation. The urgency nature of the surgery in our case was exacerbated by significant bleeding and hemodynamic instability, both of which are recognized variables that elevate surgical morbidity. (19)

Zhan et al. (2024) recognized emergent surgery as a distinct risk factor for significant blood loss after cesarean hysterectomy in cases of placenta previa accreta. Their research also emphasized cervical placental invasion and intraoperative difficulties as factors leading to bleeding. Although our patient did not experience intraoperative bladder injury, the necessity for bilateral internal iliac artery ligation corresponds with contemporary hemorrhage management measures designed to diminish pelvic blood flow, particularly in the absence of interventional radiology alternatives. (20)

Loukopoulos et al. (2023) talk about how conservative management options for PAS have been looked into to protect fertility. However, these tactics only work in carefully chosen individuals who are hemodynamically stable. In our case, uncontrolled hemorrhage required definitive care through hysterectomy, reinforcing the conclusion that immediate hysterectomy is needed when bleeding cannot be managed. (18) Garg et al. (2025) also indicated that conservative approaches frequently fail in acute presentations, especially when diagnosis is postponed. (21)

This case exemplifies the overarching public health issue emphasized by Parween et al. (2025) and Joiya et al. (2024): the escalating incidence of PAS and emergency hysterectomy resulting from increased cesarean section rates. Reducing needless primary cesarean deliveries, establishing rigorous antenatal monitoring of placenta previa, and facilitating prompt referrals to tertiary care institutions are essential measures to counteract this trend. (16) (17)

In conclusion, our case closely corresponds with the existing literature, illustrating that placenta previa with PAS, particularly in women with previous cesarean sections and insufficient antenatal care, often manifests as an obstetric emergency. It underscores the significance of prompt diagnosis, coordinated multidisciplinary care, and preparedness for substantial obstetric bleeding to enhance maternal outcomes in this increasingly common high-risk illness.

Conclusion:

This example emphasizes the essential need of antenatal surveillance in women with placenta previa and a history of cesarean procedures. Early detection of the placenta accreta spectrum facilitates planned delivery and diminishes maternal morbidity and mortality. To have good results in this high-risk obstetric disease, surgery must be done on time, blood products must be available, and a team of doctors must work together. Regular follow-up, proper imaging, and following recognized management guidelines are still the most important parts of care for placenta previa complicated by PAS.

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Conflict of Interest

The authors declare no conflict of interest.

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