Case Report

Placenta percreta and its impact on maternal morbidity and mortality – a case report

Summary

Preserving the mother-fetus dyad and reducing maternal mortality rates are widely pursued goals in medical practice. Several conditions impact these rates, with placental accreta being one of them. Accretion is the abnormal adhesion of placental tissue; when it invades the uterine serosa or adjacent structures, it is called placenta percreta. Identifying this condition and planning its management during pregnancy resolution in a referral center leads to a reduction in maternal morbidity and mortality. The case discussed highlights the importance of a multidisciplinary team, combined with good surgical management conditions, in order to reduce risks and improve outcomes in cases of placental percreta.

Keywords: placenta accreta, high risk, maternal mortality, pregnancy

Volume 12 Issue 2 - 2026

Isadora Ferreira Kozlowski
Hospital do Rocio – Campo Largo, Brasil

Correspondence: Isadora Ferreira Kozlowski, Hospital do Rocio – Campo Largo, Emilio Cornselsen St., 80540-220, Curitiba-PR; Brasil, Tel (41) 984396669

Received: May 13, 2026 | **Published:** June 24, 2026

Introduction

Maternal death is a major public health concern. Globally, approximately 73% of all maternal deaths occurred due to direct obstetric causes – diseases specific to the pregnancy and puerperal cycle, and deaths from indirect obstetric causes accounted for 27.5% – complications of pre-existing diseases. Hemorrhages, hypertensive disorders, and sepsis stood out as the main obstetric causes of maternal death.[1]

One of the conditions that presents high maternal (9.5%) and perinatal (24%) mortality is placenta percreta.[2] Placenta percreta is classified as a type of placenta that has adhered abnormally, in which the chorionic villi end up strengthening and adhering through the uterine wall along its entire length, and may even grow into organs of the abdominal cavity. Attention should be paid to placental accreta, a condition where the placenta invades the uterus and surrounding structures, as it can potentially cause vaginal bleeding, abdominal pain, and restricted fetal growth. During labor, it can lead to severe hemorrhages, and postpartum, accreta increases the risk of complications associated with uterine infections, blood clots, and the need for transfusions.[3]

Therefore, it is important to emphasize the importance of early diagnosis of placenta accreta and planning for the management of this intrapartum condition. The first line of prenatal diagnosis of this condition is ultrasound, based on the identification of imaging markers, such as the presence of intraplacental vascular gaps, disappearance of the hypoechoic retroplacental zone, and interruption of the bladder wall.[4]

The goal of this screening is to enable better planning of a cesarean section, optimizing neonatal outcomes and minimizing maternal risks. Although the literature is unclear on the ideal time for interruption, there is a higher risk of hemorrhage after 36 weeks of gestation; thus, deliveries are mostly planned for 34 weeks of gestation.[5] The relevance of practicing screening, planning and management of this condition is reiterated in order to improve the outcome involved. Therefore, a case of placenta percreta is presented below, in which a multidisciplinary approach was necessary in a referral center, which made it possible to manage risks and minimize maternal morbidity and mortality, important to bring alternatives in this type of rare case and also to highlight the relevance of screening and early diagnosis so that surgical planning is feasible.

Objective

Descriptive observational study, aiming to present a rare case with clinical relevance.

Methods

This is a descriptive study, whose report aimed to detail the clinical case presented and its interventions, comparing it with the information found in the literature. The work was authorized by the Ethics Committee of the institution where it was carried out, with authorization for continuation signed by the Clinical Director and the head of the Gynecology and Obstetrics service.

Case description

Female patient, 31 years old, G4C3, with her last cesarean section 2 years prior. She began high-risk prenatal care at a referral hospital at 21 weeks + 1 day due to placenta accreta, in the municipality of Campo Largo, Paraná. The patient was using Levothyroxine 100mcg and Sertraline 50mg. The first ultrasound was performed at 14 weeks, describing right lateral placentation, with the lower border covering the internal cervical os, related to signs that could indicate placenta increta. The patient returned for a high-risk prenatal consultation with new test results, one of which was a 30-week MRI showing a marginal placenta with signs of placental accreta without signs of invasion of adjacent structures. However, a subsequent 31-week ultrasound showed an anterior placenta with vascular infiltration on Doppler of the posterior bladder wall. On physical examination, a fetal heartbeat was auscultated, with a subsequent drop in frequency, remaining below 110 bpm. Based on this information, the patient was referred to the Obstetric Emergency Room for evaluation. Cardiotocography was performed, revealing persistent fetal bradycardia, indicating an emergency cesarean section due to acute fetal distress and placenta percreta.

The patient was promptly taken to the operating room, spinal anesthesia was administered, and the uterine opening was performed with fetal extraction and removal of the live transplacental conceptus, which was promptly delivered to the pediatrician – male, Apgar 2/6/8, weight 1740g. A hysterorrhaphy without placental delivery was performed, followed by a subtotal hysterectomy. During the procedure, intense adhesion of the bladder pole to the uterus was observed, with areas of placental insertion. It was decided to involve

a general surgery and urology team for multidisciplinary support. The bladder pole was released by general surgery, and the bladder was repaired by urology. Bladder repair performed by general surgery and urology. During the procedure, a transfusion of three units of packed red blood cells was administered due to hemodynamic instability, which was compensated with vasoactive drugs. Cavity closure was performed, and a Penrose drain and a 3-way irrigation catheter were left in place to preserve the bladder.

In the immediate postoperative period, the patient was transferred to the Intensive Care Unit (ICU), where she presented with increased vaginal bleeding in the first few hours, without hemodynamic repercussions. She showed good progress in the following 48 hours, without complications, and was subsequently transferred to a ward bed and discharged with outpatient follow-up. The plan was to maintain the irrigation catheter for 90 days and follow-up.

Discussion

Placenta percreta is considered the most severe form of placental accreta. Efforts should be made to screen for and diagnose this condition, which directly impacts maternal mortality. Among the tests that should be performed in the second trimester is ultrasound (US), with the aim of defining placental location, ideally performed between 18 and 23 weeks. Transvaginal US has a sensitivity of 87.5% and a specificity of 98.8%, constituting the gold standard for diagnosing placenta previa.[2] Depending on the anatomy and severity, each case will present in different ways.

It should be noted that in most cases, placenta percreta is an incidental finding and rarely causes symptoms. Bladder bleeding due to placenta percreta has a poor prognosis, as maternal and fetal mortality rates can increase to 9.5% and 2.4%.[10] Ultrasound findings suggestive of placenta percreta are as follows: presence of multiple placental lacunae; interruption of the uterine-posterior bladder wall interface; obliteration of the free space between the uterus and placenta; hypervascularization of the adjacent bladder wall; Myometrial thickness less than <1 mm and bridging vessels on Doppler.[6]

In addition to ultrasound, there are some alternatives to aid in diagnosis. One of them would be magnetic resonance imaging, but it is not the best method. In recent years, many researchers have focused on studying serum markers in maternal peripheral blood for accreta due to some cases that were misdiagnosed or not diagnosed with imaging tests. Among these, the following stand out: maternal serum alpha-fetoprotein (AFP), serum creatine kinase (CK), serum pro-BNP, troponin, pregnancy-related protein (PAPPA), cell-free fetal DNA (cffDNA), placenta-free mRNA (β-hCG mRNA and hPL mRNA), vascular endothelial growth factor (VEGF), placental growth factor (PlGF), human soluble vascular hemolytic endothelial growth factor receptor 1 (sFlt-1), insulin-like growth factor (IGF), and several other maternal serological indices.[7]

Mortality associated with placenta accreta is essentially due to the occurrence of massive postpartum hemorrhage, mainly when there is an attempt to remove the placenta.

The gold standard for the treatment of placenta accreta is hysterectomy after fetal extraction by cesarean section. With the aim of reducing maternal morbidity and mortality and also providing the possibility of future fertility, conservative methods have been developed, namely, expectant management, partial myometrial resection and Triple P.[4]

Traditionally, hysterectomy has been the main therapeutic measure in cases of placenta previa, and is still the preferred method used in clinical practice. A survey conducted in several reference centers confirms this trend; 252 of the 442 pregnancies included were treated with hysterectomy, and of these, transfundal hysterotomy was used in 137. This preference is even more marked in developing countries, where the scarcity of resources, particularly in the area of interventional radiology, makes the option for conservative techniques unfeasible.[4]

There is also the possibility of a conservative approach, in which the placenta is left in situ for reabsorption. However, this approach appears to be associated with serious long-term complications of hemorrhage and infection, including a 58% risk that a hysterectomy will eventually be required up to nine months after delivery.[8] Conservative management in which the placenta is left in situ appears to be associated with serious long-term complications. Of the women who left the placenta in situ, 61% suffered at least one late postoperative complication, compared to 12% of women with local resection or initial treatment by hysterectomy. Complications associated with placental in situ removal were mainly hemorrhage and infections.[2]

Severe placenta accreta distorts the uterus and surrounding anatomy and transforms the pelvis into an extremely high-flow vascular state.[9] It is taking into account this complexity that these cases should be addressed in environments with sufficient structure for the approach. Direct and indirect obstetric causes can lead women, during the pregnancy-puerperal cycle, to be admitted to an ICU, as pregnancy causes organic changes that require greater attention and specialized assistance, as in the case discussed. Eclampsia is known to be the main direct obstetric cause, followed by HELLP syndrome and hemorrhage.[10]

Suspicion significantly improves maternal prognosis by allowing for delivery planning, referral to a tertiary care center, and the presence of a multidisciplinary team to react quickly to frequent intraoperative complications.[2] Delays in diagnosis due to lack of awareness and resources can lead to potentially fatal complications, extensive blood loss, and surgical complications, ultimately impacting patient well-being and increasing healthcare costs. Access to appropriate blood products, specialized surgical expertise, and neonatal and maternal intensive care is often limited in community health centers.[5]

Strengths and Limitations: The study's strengths correspond to a rare case with a positive outcome caused by the preparedness of the team and the high-risk hospital structure. The limitations consist of not having more similar cases for comparison in the same service.

Conclusion

Analyzing the case presented, it is concluded that, although rare, placenta accreta is an extremely serious condition with a high morbidity rate, especially when it involves organs other than the uterus. It is of utmost importance to disseminate screening and its relevance, with the understanding that early diagnosis allows for a more positive outcome, enabling adequate planning for pregnancy termination and management of the situation.

The expansion of diagnostic methods beyond imaging exams should be encouraged to allow for greater specificity in screening and better dissemination of the method. When diagnosed, placenta accreta should be monitored prenatally, and pregnancy termination should be planned as an elective surgical procedure in a referral center, if possible with a multidisciplinary team and intensive care unit, since a better surgical and post-operative structure ultimately improves the outcome and increases maternal survival.

Citation: Kozlowski IF.Placenta percreta and its impact on maternal morbidity and mortality – a case report. *Pregnancy & Child Birth*. 2026;12(2):61–63. DOI: 10.15406/ipcb.2026.12.00342

Acknowledgements

None.

Conflict of interest

Nothing to declare.

Funding source

None.

References

1. Mourão LF, Mendes IC, Marques ADB, et al. ICU admissions for obstetric causes. *Enfermeria Global*. 2019;18(1):304–345.
2. Larissa Reis Fernandes S, Carolina Calaça de Lima I, Aline Alves Moreira D, et al. Placenta percreta com invasão de bexiga: um relato de caso. *Revista Médica de Minas Gerais*. 2021;31.
3. Kelly de Lima e Silva A, Joceilson Cruz de Assis J, Thaís Silva do Nascimento L, et al. Acretismo placentário e suas complicações: revisão integrativa. *Brazilian Journal of Implantology and Health Sciences*. 2024;6(3):1574–1586.
4. Birsanu M. Acretismo placentar: fatores de risco, diagnóstico e abordagemclínica. *Revisão Narrativa Área Científica De Obstetrícia*. 2023.
5. Abousifein M, Shishkina A, Leyland N. Addressing diagnosis, management, and complication challenges in placenta accreta spectrum disorder: a descriptive study. *J Clin Med*. 2024;13(11).
6. Adu-Bredu TK, Rijken MJ, Nieto-Calvache AJ, et al. A simple guide to ultrasound screening for placenta accreta spectrum for improving detection and optimizing management in resource limited settings. *International Journal of Gynecology and Obstetrics*. 2023;160:732–41.
7. Arakaza A, Zou L, Zhu J. Placenta accreta spectrum diagnosis challenges and controversies in current obstetrics: a review. *International Journal of Women's Health*. 2023;15:635–654.
8. Clausen C, Lönn L, Langhoff-Roos J. Management of placenta percreta: A review of published cases. *Acta Obstetricia et Gynecologica Scandinavica*. 2014;93:138–143.
9. Einerson BD, Gilner JB, Zuckerwise LC. Placenta accreta spectrum. *Obstetrics and Gynecology*. 2023;142(1):31–50.
10. Suhaimi N, Ishak A, Mohammad N. A near miss case of placenta percreta at primary care: A case report. *Electronic Journal of General Medicine. 2023*;20(1).

Citation: Kozlowski IF.Placenta percreta and its impact on maternal morbidity and mortality – a case report. *Pregnancy & Child Birth*. 2026;12(2):61–63.
DOI: 10.15406/ipcb.2026.12.00342