

## Placenta accreta spectrum disorders



### What placenta accreta spectrum means

In a typical pregnancy, the placenta attaches to the uterine lining and separates after the baby is born. In placenta accreta spectrum disorders, the interface between placenta and uterus is abnormal, so the placenta is too firmly attached or grows too deeply. This creates a high risk of severe hemorrhage if attempts are made to remove the placenta after delivery.

The spectrum is usually described in three categories. Placenta accreta means the placenta attaches directly to the myometrium, the muscular wall of the uterus, without normal intervening decidua. Placenta increta means the placenta invades into the myometrium. Placenta percreta is the deepest form, in which placental tissue penetrates through the uterine wall and may involve nearby organs, most commonly the bladder.

These terms are clinically useful, but real cases may not fit perfectly into neat categories before surgery. Imaging can strongly suggest PAS, yet the final extent may become clearer only during cesarean delivery. This uncertainty is one reason suspected PAS is managed with careful planning rather than a routine birth approach.

## **Why PAS happens and who is at higher risk**

PAS is strongly linked to disruption or scarring of the uterine lining. A previous cesarean delivery is the most important risk factor, and the risk rises with the number of prior cesareans. The risk is especially high when the placenta implants low in the uterus over or near the cervix, a condition known as placenta previa.

Other factors can include previous uterine surgery, such as myomectomy, curettage, operative hysteroscopy, or other procedures that may affect the endometrium and myometrium. Assisted reproductive technology, advanced maternal age, and prior PAS are also discussed in the medical literature as associated factors. However, having a risk factor does not mean PAS is certain, and PAS can occasionally occur without a classic history.

The combination of placenta previa and prior cesarean delivery deserves particular attention. If a low-lying placenta or previa is identified on ultrasound, clinicians often review surgical history carefully and may repeat imaging later in pregnancy to assess placental position and signs of abnormal invasion.

## **Symptoms and clinical presentation**

Many people with PAS do not have specific symptoms before delivery. The condition is often suspected because of risk factors and ultrasound findings rather than because a person feels unwell. When placenta previa is also present, painless vaginal bleeding in the second or third trimester may occur, but bleeding is not required for PAS to be present.

Possible warning concerns include vaginal bleeding, contractions, pelvic pressure, abdominal pain, or signs of preterm labor. Severe pain, heavy bleeding, fainting, dizziness, or decreased fetal movement should be treated as urgent. Because late-pregnancy bleeding can have several causes, including placenta previa and placental abruption, prompt assessment is safer than trying to interpret the amount or color of blood at home.

It is also common for the emotional symptoms to be significant: fear of hemorrhage, worry about hysterectomy, concern for the baby, and stress about

hospitalization or preterm delivery. These reactions are understandable. Asking for repeated explanations, a written care plan, and mental health support is appropriate, not excessive.

### **How PAS is diagnosed or suspected**

Antenatal ultrasound is the primary diagnostic modality for suspected PAS. Evaluation typically includes grayscale sonography and color Doppler assessment. Sonographic signs can include placental lacunae, loss of the normal clear zone between placenta and myometrium, thinning of the myometrium over the placenta, increased vascularity, bridging vessels, and abnormalities at the uterine-bladder interface. The exact interpretation depends on gestational age, placental location, image quality, and examiner expertise.

Ultrasound is most informative when clinicians know the risk context. For example, an anterior placenta previa overlying a prior cesarean scar raises concern and may prompt targeted imaging by an experienced obstetric sonographer or maternal-fetal medicine specialist.

MRI is not the first-line test for every patient, but it may help in selected cases, such as posterior placentas, suspected percreta, unclear ultrasound findings, or concern about involvement of adjacent organs. Even with good imaging, PAS diagnosis is probabilistic before birth. A normal ultrasound does not always eliminate risk in a high-risk patient, and abnormal findings should be interpreted by specialists in the context of the full clinical picture.

### **Delivery planning and why location matters**

ACOG emphasizes that outcomes are optimized when delivery occurs before the onset of labor or major bleeding at a facility with appropriate maternal resources. For suspected PAS, this often means a level III or IV maternal care facility with a multidisciplinary team. The team may include maternal-fetal medicine, obstetric anesthesia, gynecologic oncology or pelvic surgeons, neonatology, interventional radiology where available, urology when bladder involvement is suspected, critical care, and a blood bank prepared for massive transfusion.

Delivery timing is individualized. In many planned PAS cases, delivery is

scheduled in the late preterm period to balance the risks of prematurity against the risks of spontaneous labor, bleeding, or emergency surgery. Corticosteroids for fetal lung maturation may be considered depending on gestational age and clinical circumstances, under obstetric guidance.

The commonly recommended surgical approach for confirmed or strongly suspected PAS is cesarean hysterectomy with the placenta left in situ, meaning the surgeon avoids forcibly removing the placenta. Attempted placental removal can trigger catastrophic hemorrhage. The uterine incision may be planned away from the placenta, sometimes requiring a nonstandard incision. Blood products, large-bore IV access, invasive monitoring, and postoperative intensive care availability may be part of the plan.

This is a major surgery, and the possibility of hysterectomy can be emotionally devastating for people who hoped for future pregnancies. Compassionate counseling should include not only surgical risks but also fertility implications, grief, recovery needs, lactation support, and neonatal expectations.

### **Conservative and expectant approaches**

In select situations, clinicians may discuss conservative or expectant management, such as leaving the placenta in place after delivery while preserving the uterus. These approaches are not routine and are generally reserved for carefully selected patients in centers with substantial expertise. Potential risks include delayed hemorrhage, infection, need for later hysterectomy, thromboembolic complications, prolonged follow-up, and uncertainty about how long placental tissue will take to resorb.

Because the risks are significant, decisions about conservative management require detailed counseling. The person's stability, desire for future fertility, extent of invasion, surgical findings, available expertise, and ability to return quickly for emergency care all matter. No one should feel pressured into a fertility-preserving plan if the safest course is hysterectomy, and no one should have their reproductive concerns dismissed when options are being considered.

### **Preparing emotionally and practically**

A PAS diagnosis or strong suspicion often turns pregnancy care into a highly medicalized experience. Appointments may increase, imaging may be repeated, and birth may be planned earlier than expected. It can help to ask your care team for a written summary that includes the suspected diagnosis, planned delivery location, timing range, emergency symptoms, transfusion planning, anesthesia plan, neonatal plan, and who to contact after hours.

Practical preparation may include arranging childcare, transportation to a tertiary center, time off work, support during postpartum recovery, and blood transfusion consent discussions. If hysterectomy is likely, it is reasonable to ask what that means for hormones, ovaries, menstruation, future fertility, sexual recovery, and emotional health. In most cesarean hysterectomies for PAS, ovaries are often preserved unless there is another reason to remove them, but your surgeon should explain your specific plan.

Many patients benefit from meeting anesthesia and neonatology before delivery. A mental health professional, social worker, chaplain, or patient support group can also be valuable. Feeling scared does not mean you are not coping; PAS is a high-risk condition, and needing support is normal.