CONDITION

Placental abruption

Learn about placental abruption, including warning signs, risk factors, diagnosis, treatment, pregnancy complications, and when to seek urgent care.

WHAT IT IS
Partial or complete placental separation before birth

BODY SYSTEM
Reproductive system

MAIN SYMPTOMS
Vaginal bleeding, abdominal pain, back pain, frequent contractions

WHAT CAUSES IT
Often unknown

HOW IT IS DIAGNOSED
Clinical assessment, fetal monitoring, blood tests and ultrasound

MAIN TREATMENT
Hospital stabilization, monitoring and urgent delivery when needed

CAN IT BE CURED?
No - management is observation or delivery

IS IT AN EMERGENCY?
Sometimes - heavy bleeding, severe pain or fainting

LONG-TERM OUTLOOK
Outcomes range from stability to serious complications or stillbirth

Overview

Abruptio placenta, more commonly called placental abruption , is the partial or complete separation of the placenta from the wall of the uterus before the baby is born. It usually happens after 20 weeks of pregnancy.

The placenta supplies the baby with oxygen and nutrients through the umbilical cord. It also allows waste products to pass from the baby to the pregnant person's circulation. If the placenta separates too early, this exchange can be reduced or interrupted.

Abruption can range from a small, stable separation to a serious obstetric emergency. The main concerns are bleeding in the pregnant person and reduced oxygen delivery to the baby. A larger separation may require urgent delivery.

Blood may leave the body through the vagina, or it may remain trapped behind the placenta. This is called concealed bleeding . Because bleeding can be hidden, the amount seen from the vagina does not always show how severe the abruption is.

Placental abruption is different from placenta previa. With placenta previa, the placenta lies near or over the opening of the cervix. Placenta previa often causes painless bleeding. Abruption is more likely to cause pain, tenderness, or frequent contractions, although symptoms can overlap.

Symptoms

Symptoms may begin suddenly or develop more gradually. They can include:

Some people have significant placental separation without visible vaginal bleeding. Others may have only mild symptoms. Symptoms alone cannot confirm the diagnosis, but bleeding or pain later in pregnancy should be assessed promptly.

Contact your maternity unit or obstetric clinician right away for any vaginal bleeding after 20 weeks, new persistent abdominal pain, regular contractions, or reduced fetal movement. Do not wait for a routine appointment.

Call emergency services for heavy bleeding, severe or rapidly worsening pain, fainting, confusion, breathing difficulty, or signs of shock such as cold and clammy skin. Emergency assessment is also needed after a major fall, motor vehicle collision, or forceful injury to the abdomen during pregnancy, even if symptoms seem mild.

- Vaginal bleeding, which may be light or heavy
- Sudden or ongoing abdominal pain
- Back pain
- A tender, firm, or tight-feeling uterus
- Contractions that occur close together or do not fully relax
- Reduced or changed fetal movement
- Weakness, dizziness, faintness, or shortness of breath from blood loss

Causes and risk factors

Placental abruption often occurs without a single clear cause. It may involve damage to small blood vessels where the placenta attaches to the uterus. Bleeding can then form a clot behind

the placenta and push it away from the uterine wall.

Conditions or events associated with a higher risk include:

These factors do not mean that an abruption will occur. Many people with one or more risk factors do not develop it, and many cases happen in pregnancies without an obvious warning.

High blood pressure is an important modifiable risk. Keeping prenatal appointments allows the care team to check blood pressure and look for signs of preeclampsia. Avoiding tobacco, cocaine, and non-prescribed stimulants also reduces preventable risks.

Seat belts should be worn throughout pregnancy. The lap belt belongs low across the hips and below the abdomen, while the shoulder belt should cross the chest. After significant trauma, medical assessment may include several hours of fetal and contraction monitoring because symptoms can be delayed.

- High blood pressure during pregnancy, including preeclampsia
- Long-term high blood pressure
- A placental abruption in a previous pregnancy
- Smoking or exposure to cocaine or other stimulants like methylphenidate or lisdexamfetamine
- A significant abdominal injury, such as from a collision or fall
- Early rupture of the amniotic sac, especially when pregnancy is preterm
- Infection inside the uterus
- Carrying more than one baby
- A rapid decrease in uterine size, such as after the first baby is born in a twin pregnancy
- Certain blood-clotting disorders
- Older maternal age

Diagnosis

Placental abruption is mainly a clinical diagnosis , meaning clinicians use the symptoms, examination findings, fetal heart-rate pattern, and test results together. There is no single test that reliably confirms or excludes every case.

The care team will ask about bleeding, pain, contractions, fetal movement, blood pressure problems, injuries, and previous pregnancies. They will check vital signs, abdominal tenderness, uterine tone, and the baby's heart rate.

An ultrasound can locate the placenta, assess the baby, and help look for other causes of bleeding, such as placenta previa. It may show blood collected behind the placenta, but a normal ultrasound does not rule out an abruption. Fresh blood and placental tissue can look similar on imaging.

Blood tests may include:

Continuous fetal heart-rate monitoring may show whether the baby is tolerating the pregnancy and contractions. The pattern can help guide how urgently delivery is needed.

People with Rh-negative blood may need Rh immune globulin after pregnancy bleeding to reduce the chance of forming antibodies against Rh-positive blood. The clinical team determines whether it is needed and whether additional testing is required.

- A complete blood count to assess red blood cells and platelets
- Blood type and compatibility testing in case a transfusion is needed
- Tests of blood clotting
- Fibrinogen, a blood-clotting protein that can fall in severe cases
- Kidney or liver tests when heavy bleeding or preeclampsia is a concern

Treatment and management

Treatment depends on the amount of bleeding, the pregnant person's condition, the baby's heart-rate pattern, gestational age, and whether labor has started. Management takes place in a hospital when abruption is suspected.

The first priority is stabilization. The team may place intravenous lines, take blood samples, monitor blood pressure and urine output, and provide fluids or blood products when needed. Oxygen or other supportive care may be used based on the person's condition.

Delivery is usually needed promptly if there is severe bleeding, unstable blood pressure, worsening clotting problems, or evidence that the baby is not receiving enough oxygen. A cesarean birth may be the quickest option when the baby is in distress and vaginal birth is not imminent. In some situations, vaginal birth is safer or progresses quickly, especially if labor is advanced or the baby has died.

If the separation appears limited, bleeding has stopped, and both the pregnant person and baby are stable, clinicians may recommend close observation rather than immediate delivery. This is more likely when the pregnancy is preterm and continuing it may benefit the baby. Monitoring may include repeated examinations, blood tests, fetal heart-rate testing, and ultrasound assessment of growth.

Medicines may be considered when preterm birth is likely. For example, corticosteroids like prednisone or hydrocortisone may be offered to help the baby's lungs and other organs mature. Magnesium sulfate may be used in selected early preterm pregnancies to help protect the baby's brain. These decisions depend on gestational age and the urgency of delivery; treatment should not delay a delivery needed for safety.

Bed rest at home does not treat an acute abruption. People discharged after evaluation need clear instructions about activity, monitoring, and when to return. They should not drive themselves for reassessment if they are bleeding heavily, faint, or in severe pain.

Complications

Complications depend on how much of the placenta separates, how quickly bleeding develops, and how soon treatment is provided.

Possible complications for the pregnant person include severe blood loss, anemia, shock, and the need for a blood transfusion. In serious cases, widespread activation of the clotting system can use up platelets and clotting proteins. This is called disseminated intravascular coagulation , or DIC, and it can cause bleeding from several areas.

Reduced blood flow from major blood loss can injure the kidneys or other organs. Rarely, uncontrolled bleeding may require surgery, including removal of the uterus, to save the person's life.

For the baby, placental separation can reduce oxygen and nutrient delivery. This may lead to an abnormal heart-rate pattern, impaired growth when the problem is chronic, preterm birth, brain injury from severe oxygen loss, or stillbirth. Some newborns require care in a neonatal intensive care unit because of prematurity or complications during delivery.

Placental abruption can also be emotionally distressing, especially after an emergency birth, serious illness, or pregnancy loss. Follow-up care may include support for anxiety, grief, sleep problems, or symptoms related to a traumatic birth experience.

Follow up

After an abruption, follow-up depends on whether the pregnancy is continuing or delivery has occurred.

If the pregnancy continues, the obstetric team may schedule more frequent visits and fetal monitoring. Follow-up may assess bleeding, contractions, blood pressure, fetal movement, amniotic fluid, and the baby's growth. Keep these appointments, but do not wait for the next

visit if bleeding, pain, contractions, or reduced movement returns.

After delivery, clinicians may repeat blood counts or clotting tests and treat anemia if present. Recovery instructions depend on blood loss, delivery method, and other complications. Routine postpartum care should include discussion of physical recovery, contraception if desired, emotional health, and plans for future pregnancies.

A previous placental abruption raises the chance of abruption in another pregnancy, but recurrence is not certain. Before or early in a future pregnancy, discuss the history with an obstetric clinician. Care may include reviewing blood pressure, medicines, smoking or substance use, and other conditions that can be improved before conception.

Seek urgent medical care during any future pregnancy for vaginal bleeding, persistent abdominal pain, frequent contractions, reduced fetal movement, or significant abdominal trauma.

Sources

- American College of Obstetricians and Gynecologists. "Medically Indicated Late-Preterm and Early-Term Deliveries." ACOG Committee Opinion No. 831 . Obstetrics & Gynecology . 2021;138(1):e35-e39.
- Gyamfi-Bannerman C, Society for Maternal-Fetal Medicine. "SMFM Consult Series #44: Management of Bleeding in the Late Preterm Period." American Journal of Obstetrics and Gynecology . 2018;218(1):B2-B8.
- Royal College of Obstetricians and Gynaecologists. Antepartum Haemorrhage . Green-top Guideline No. 63. London: RCOG; 2011.
- Brandt JS, Ananth CV. "Placental Abruption at Near-Term and Term Gestations: Pathophysiology, Epidemiology, Diagnosis, and Management." American Journal of Obstetrics and Gynecology . 2023;228(5 Suppl):S1313-S1329.
- Tikkanen M. "Placental Abruption: Epidemiology, Risk Factors and Consequences." Acta Obstetricia et Gynecologica Scandinavica . 2011;90(2):140-149.
- MSD Manual Professional Edition. "Placental Abruption (Abruptio Placentae)." Merck & Co., Inc.; reviewed and revised 2024.