

## Placental abruption

Placental abruption means the placenta has detached (come away) from the wall of the uterus, either partly or totally. This can cause bleeding in the mother. It may also interfere with the unborn baby's supply of oxygen and nutrients, which the placenta provides from the mother's bloodstream through the lining of the uterus.

Doctors cannot reattach the placenta. Without prompt medical treatment, a severe case of placental abruption can have dire consequences for the mother and her unborn child, including death.

Worldwide, placental abruption occurs in about one pregnancy in every 100. In about half of cases, placental abruption is mild and can be managed by ongoing close monitoring of the mother and baby. About 25 per cent of cases are moderate, while the remaining 25 per cent threaten the life of both baby and mother.

### Symptoms

Some of the symptoms and signs of moderate to severe placental abruption include:

- Bleeding, most commonly noticed when the woman starts bleeding from the vagina
- Continuous abdominal pain
- Continuous lower back pain
- Painful abdomen (belly) when touched
- Tender and hard uterus
- Very frequent uterine contractions
- Fetal distress – for example, abnormal heart rhythm.

In some cases, bleeding may occur but the blood may clot between the placenta and the wall of the uterus, so vaginal bleeding may be scanty or even non-existent. This is known as a 'retroplacental clot'.

### The cause is unknown in most cases

In most cases, doctors don't know the exact cause or causes of placental abruption. It is thought that an abnormal blood supply in the uterus or placenta may play a role, but the cause of the suspected abnormality isn't clear.

Some of the known causes of placental abruption include:

- **Abdominal trauma** – an injury to the pregnant woman's abdomen may tear the placenta from the wall of the uterus. Examples of events that may cause this type of injury could include a car accident, assault or fall.
- **Uterine decompression** – this is a sudden loss of amniotic fluid from the uterus, which can suck the placenta from the uterus wall. Possible causes of uterine decompression include the birth of the first twin (or multiple) or rupture of amniotic membranes when there is excessive amniotic fluid.

### Risk factors

While the exact cause in most cases is unknown, certain factors make a pregnancy more susceptible to placental abruption. Risk factors may include:

- **Advanced maternal age** – older mothers are at increased risk of a range of pregnancy complications, including placental abruption.
- **Prior pregnancy** – the risk increases the more pregnancies a woman has had.
- **Multiple fetuses** – carrying twins, triplets, quads or more increases the risk of placental abruption compared to carrying a single fetus.
- **Prior placental abruption** – if a woman has had the condition before, she is at high risk of having it again.
- **Hypertension** – high blood pressure increases the risk of abnormal bleeding between the placenta and the wall of the uterus. In nearly half of placenta abruption cases (44%), the pregnant mother is hypertensive. One of the most common causes of hypertension during pregnancy is a condition known as pre-eclampsia.
- **Excessive amniotic fluid (polyhydramnios)** – more fluid than normal increases the risk of bleeding between the placenta and the uterus wall.
- **Substance use** – cigarette smoking, alcohol use and taking drugs such as methamphetamine or cocaine during pregnancy increase the risk of placenta abruption as well as a range of other serious health problems for both mother and unborn baby.
- **Some blood conditions** – particularly any condition that affects the blood's ability to clot.
- **Amniocentesis** – a prenatal test that involves a needle inserted through the mother's abdomen and into the uterus to withdraw amniotic fluid. Very rarely, the needle puncture causes bleeding.
- **Amnioreduction** – the prenatal condition of too much amniotic fluid is called polyhydramnios. Amnioreduction is a procedure to remove excess amniotic fluid using a needle inserted through the mother's abdomen into the uterus. This procedure uncommonly causes bleeding.
- **External cephalic version** – the doctor uses ultrasound imaging and external massage on the mother's abdomen to try to turn the baby from a head-up position (breech) to a head-down position in readiness for childbirth. This procedure can occasionally (rarely) dislodge the placenta.

## Complications

Complications in severe cases can include:

- Decreased oxygen to the baby, which could lead to brain damage
- Stillbirth
- Maternal blood loss leading to shock
- Emergency hysterectomy (surgical removal of the uterus) if the bleeding cannot be controlled
- Maternal death from severe blood loss.

## Diagnosis

The symptoms and signs of placental abruption can mimic those of other pregnancy conditions, such as placenta previa and pre-eclampsia. Information that may be used to diagnose placental abruption includes:

- Medical history
- Physical examination, including checking the tenderness and tone of the uterus
- Internal examination of the vagina and cervix, using a speculum
- Blood tests
- Ultrasound to check the placenta
- Fetal heartbeat monitoring.

Sometimes, the diagnosis of placental abruption can't be confirmed until childbirth, when the placenta is delivered with an attached blood clot that appears old rather than fresh. The placenta is usually sent to a laboratory for further diagnostic testing.

## Treatment

All cases of suspected placental abruption, regardless of severity, should be closely monitored to protect the health and safety of the mother and child. This monitoring is usually done in hospital and should include regular checks of the vital signs of both mother and baby. Treatment depends on the severity of the condition but may include:

- **Mild cases, earlier in pregnancy** – if the baby isn't distressed and if the vaginal bleeding stops, you may be allowed to go home and rest. See your doctor for regular check-ups and if your condition changes.
- **Moderate cases, earlier in pregnancy** – you may need to stay in hospital until the baby is old enough for the doctor to safely induce labour. The doctor may recommend medicines to help the baby's lungs mature more quickly prior to birth.
- **Mild to moderate cases, later in pregnancy** – at 36 weeks' gestation or more, the doctor may recommend delivery. A vaginal birth may be possible. However, if the placenta separates further from the wall of the uterus during labour, the doctor may switch to immediate delivery via caesarean section.
- **Severe cases** – immediate delivery is the safest treatment. The mother may require supportive care. Heavy maternal bleeding may be treated with a blood transfusion or emergency hysterectomy or both.

## Prevention

While it is impossible to prevent placental abruption, the risk can be reduced. Suggestions include:

- Avoid all substances during pregnancy including cigarettes, alcohol, medicines (unless prescribed by your doctor) and street drugs.
- Control high blood pressure. Consult with your doctor for information, advice and treatment.
- Reduce your risk of trauma – for example, wear a seatbelt when travelling in a car and avoid the possibility of falls.
- Talk to your doctor if you have had placental abruption in a previous pregnancy.
- Take folic acid as recommended by your doctor or midwife.

## Where to get help

- Always call an ambulance in an emergency Tel. 000
- Your doctor
- Obstetrician
- NURSE-ON-CALL Tel. 1300 60 60 24 – for expert health information and advice (24 hours, 7 days)
- Emergency department of your nearest hospital

## Things to remember

- Placental abruption means the placenta has detached from the wall of the uterus, either partly or totally. This can cause bleeding in the mother and may interfere with the baby's supply of oxygen and nutrients.
- The cause is unknown in most cases, but risk factors may include maternal high blood pressure, abdominal trauma and substance misuse.
- Without prompt medical treatment, a severe case of placental abruption can have dire consequences for the mother and her unborn child, including death.

**This page has been produced in consultation with, and approved by:**

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