CONDITION

Preeclampsia

Preeclampsia is pregnancy-related high blood pressure that can affect the placenta and organs.

WHAT IT IS
Pregnancy-related high blood pressure with possible organ and placenta problems

BODY SYSTEM
Pregnancy, heart and circulation, kidneys, liver, and brain

MAIN SYMPTOMS
Headache, vision changes, upper abdominal pain, sudden swelling

WHAT CAUSES IT
Placental and blood-vessel changes; exact cause unclear

HOW IT IS DIAGNOSED
Blood pressure measurements, urine testing, and blood tests

MAIN TREATMENT
Monitoring, blood pressure medicine, seizure prevention, and delivery

CAN IT BE CURED?
Yes - usually resolves after delivery

IS IT AN EMERGENCY?
Sometimes - severe symptoms or very high blood pressure

LONG-TERM OUTLOOK
Most recover; future heart and pregnancy risks remain

Overview

Preeclampsia is a pregnancy condition involving new high blood pressure, usually after 20 weeks. It may also cause protein to leak into the urine or affect organs such as the kidneys, liver, brain, or blood-clotting system.

The condition is linked to problems with the placenta and the blood vessels supplying it. The placenta is the organ that provides oxygen and nutrients to the developing baby.

Preeclampsia can range from mild changes found during a routine appointment to a serious condition needing hospital care. Some people feel well even when their blood pressure is high, which is why blood pressure and urine checks are an important part of pregnancy care.

Preeclampsia can also begin after the baby is born. This is called postpartum preeclampsia. It

most often appears within the first several days after delivery, but it can occur later.

Delivery of the baby and placenta removes the underlying trigger. However, symptoms and high blood pressure do not always settle immediately, so follow-up after birth remains important.

Symptoms

Preeclampsia often causes no noticeable symptoms at first. It may be detected through a high blood pressure reading or protein found in a urine sample.

Possible symptoms include:

Swelling of the feet and ankles is common in pregnancy and does not by itself mean you have preeclampsia. Sudden swelling, especially with headache, vision changes, or upper abdominal pain, needs prompt assessment.

A seizure caused by preeclampsia is called eclampsia. This is an emergency.

- A severe or persistent headache
- Blurred vision, flashing lights, spots, or other vision changes
- Pain below the ribs, especially on the right side
- Nausea or vomiting later in pregnancy
- Sudden swelling of the face or hands
- Rapid swelling or weight gain caused by fluid
- Shortness of breath
- Feeling unusually unwell

Causes and risk factors

The exact cause of preeclampsia is not fully understood. It appears to begin with abnormal development of the placenta and the blood vessels that supply it. This can affect blood flow and release substances that disturb blood vessels throughout the body.

Preeclampsia is not caused by something you did or did not do.

It can occur in any pregnancy, but the chance is higher with:

Having one or more risk factors does not mean you will develop preeclampsia. Some people who develop it have no known risk factors.

Someone with high blood pressure before pregnancy can develop superimposed preeclampsia . This means new signs of preeclampsia appear on top of existing hypertension.

- Preeclampsia in an earlier pregnancy
- Chronic high blood pressure
- Kidney conditions
- Type 1 or type 2 diabetes
- Autoimmune conditions such as lupus or antiphospholipid syndrome
- Pregnancy with twins or more babies
- A first pregnancy
- A close family history of preeclampsia
- Obesity
- Pregnancy through assisted reproduction, including in vitro fertilisation
- A long gap between pregnancies

Diagnosis

Preeclampsia is diagnosed from blood pressure measurements and evidence that the pregnancy is affecting the kidneys, liver, blood, brain, or placenta.

Blood pressure is recorded as two numbers. The upper number is the pressure when the heart contracts. The lower number is the pressure when the heart relaxes. A diagnosis usually requires repeated readings, although very high blood pressure may need to be confirmed and treated more quickly.

Tests may include:

Protein in the urine is common in preeclampsia, but it is not required for diagnosis if there are other signs of organ problems.

Your care team will also consider other explanations for high blood pressure, abnormal blood tests, or similar symptoms. The results help show how closely you and the baby need to be monitored.

- A urine test for protein
- Blood tests for kidney and liver function
- A full blood count, including the number of platelets involved in clotting

- Ultrasound scans to check the baby's growth and amniotic fluid
- Monitoring of the baby's heart rate

Treatment and management

Treatment is based on how high your blood pressure is, whether your organs are affected, the baby's health, and how far the pregnancy has progressed.

Monitoring may take place through frequent outpatient appointments or in hospital. It can include repeated blood pressure checks, blood and urine tests, symptom reviews, and checks of the baby's growth and heart rate.

Blood pressure medicines may be used to lower dangerously high readings and reduce the risk of complications such as stroke. The medicine selected depends on the stage of pregnancy and your wider health.

Magnesium sulfate may be given through a vein when there is a significant risk of seizures. It is also used to treat eclampsia. It is not the same as an ordinary magnesium supplement.

If an early birth is expected, corticosteroid medicine may be offered to help the baby's lungs prepare for birth. This does not treat preeclampsia itself.

The only way to remove the underlying trigger is to deliver the baby and placenta. The timing balances the risks of continuing the pregnancy against the risks of being born early. If the condition is stable and the pregnancy is not yet near term, careful monitoring may allow more time. Severe or worsening preeclampsia can make earlier delivery safer.

Delivery may be induced vaginally or performed by caesarean section. Preeclampsia does not automatically mean you will need a caesarean birth.

Blood pressure monitoring continues after delivery. Some people need blood pressure medicine for several weeks or longer.

Complications

Most people recover, particularly when preeclampsia is recognised and managed promptly. Possible complications can affect both the pregnant person and the baby.

Complications for the pregnant person include:

HELLP syndrome involves the breakdown of red blood cells, raised liver enzymes showing liver stress, and low platelets. It is a serious form of pregnancy-related illness that can occur with preeclampsia.

Reduced blood flow through the placenta may limit the baby's growth or reduce oxygen supply. Preeclampsia can also lead to premature birth. In severe cases, pregnancy loss or stillbirth can occur.

A history of preeclampsia raises the chance of having it in a future pregnancy. It is also linked with a higher long-term risk of high blood pressure, heart disease, and stroke. This does not mean those problems are certain to develop.

- Eclampsia, meaning seizures
- Stroke
- Liver or kidney injury
- Fluid in the lungs, called pulmonary oedema
- Problems with blood clotting
- Placental abruption, when the placenta separates too early
- HELLP syndrome

Prevention

Preeclampsia cannot always be prevented. There is no guaranteed diet, activity plan, or home treatment that stops it from developing.

Low-dose aspirin can reduce the risk for some people with specific risk factors. It is usually started during pregnancy on the advice of a maternity clinician. Do not start aspirin for this purpose without medical guidance.

Calcium supplementation may be recommended in settings where dietary calcium intake is low. Whether it is appropriate depends on your diet, health, and local pregnancy guidance.

Before or early in pregnancy, managing existing high blood pressure, diabetes, kidney conditions, and autoimmune conditions may help reduce avoidable risks. Regular antenatal appointments allow rising blood pressure to be found before symptoms appear.

Bed rest and severe salt restriction are not reliable ways to prevent preeclampsia and may have disadvantages.

Living with it and what to expect

Preeclampsia can change over days or weeks. A person who feels well may still need frequent checks because blood pressure, blood results, or the baby's growth can change.

Monitoring can disrupt work, family life, and birth plans. If hospital care or early delivery is needed, you may have little time to adjust. Ask for explanations in plain language and involve a support person if that helps you take in information.

After delivery, blood pressure may remain high or rise further for several days. Headache, vision changes, breathing trouble, and upper abdominal pain still matter after the baby is born. Keep taking prescribed medicine until your care team advises a change.

For most people, blood pressure and other effects improve over days to weeks. Some need treatment for several months, and a smaller number are found to have ongoing high blood pressure.

Postnatal follow-up should include a review of blood pressure and recovery. Longer-term checks of blood pressure and cardiovascular risk are also important. Tell clinicians in future pregnancies that you have had preeclampsia, as you may need earlier assessment or preventive treatment.

Emotional recovery can take time, especially after severe illness, an unexpected birth, or neonatal intensive care. Support is available for anxiety, low mood, trauma symptoms, and difficulties adjusting after birth.

When to get medical help

Contact your maternity assessment service urgently if you are pregnant or recently gave birth and develop:

Do not wait for a routine appointment when these symptoms are present.

Call emergency services for a seizure, severe trouble breathing, chest pain, collapse, confusion, weakness on one side, or difficulty speaking.

For routine follow-up, attend planned blood pressure checks, blood tests, scans, and postnatal reviews even if you feel well. Contact your care team sooner if symptoms return or your home readings are repeatedly above the range they gave you.

- A severe or persistent headache
- Blurred vision, flashing lights, or loss of vision
- Strong pain below the ribs or in the upper abdomen
- Sudden swelling of the face or hands
- New vomiting with headache or abdominal pain
- A home blood pressure reading in the severe range, such as 160/110 mmHg or higher

- Reduced or changed baby movements

Common questions

Does preeclampsia go away after birth?

It usually resolves after the baby and placenta are delivered, but not immediately. Blood pressure can stay high or worsen during the first several days after birth. Monitoring and medicine may be needed for weeks or months.

Can I have preeclampsia without knowing it?

Yes. Some people have no symptoms and are diagnosed during a routine blood pressure or urine check. Symptoms alone cannot reliably show how severe the condition is.

Does swollen feet mean I have preeclampsia?

Not usually. Mild swelling of the feet and ankles is common in pregnancy. Sudden swelling of the face or hands, especially with headache, vision changes, or upper abdominal pain, needs urgent assessment.

Will I have to deliver my baby early?

Not always. The timing depends on your health, the baby's condition, and the stage of pregnancy. Worsening or severe preeclampsia may make early delivery the safer option.

Can preeclampsia happen again?

Yes, but recurrence is not certain. The chance is higher after early or severe preeclampsia and when ongoing risk factors, such as chronic high blood pressure or kidney problems, are present.

Can I breastfeed after preeclampsia?

In many cases, yes. Several blood pressure medicines used after birth are compatible with breastfeeding. Your care team can check the specific medicines you receive and account for whether your baby was born early.

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