CONDITION

Pregnancy-induced hypertension

Pregnancy-induced hypertension is high blood pressure that first develops after 20 weeks of pregnancy.

WHAT IT IS
New high blood pressure after 20 weeks of pregnancy

BODY SYSTEM
Heart and circulation

MAIN SYMPTOMS
Often none, headache, vision changes, upper abdominal pain

WHAT CAUSES IT
Pregnancy-related blood vessel changes; exact cause unknown

HOW IT IS DIAGNOSED
Repeated blood pressure checks, urine tests, blood tests

MAIN TREATMENT
Monitoring, blood pressure medicines, planned birth when appropriate

CAN IT BE CURED?
Yes - usually resolves after pregnancy

IS IT AN EMERGENCY?
Sometimes - severe pressure or pre-eclampsia warning signs

LONG-TERM OUTLOOK
Usually resolves, but future cardiovascular risk remains higher

Overview

Pregnancy-induced hypertension means high blood pressure that begins after 20 weeks of pregnancy. It is now usually called gestational hypertension .

Blood pressure is the force of blood pushing against your artery walls. A reading has two numbers. The top number measures pressure when the heart contracts. The bottom number measures pressure when the heart relaxes.

Gestational hypertension is diagnosed when blood pressure is repeatedly 140/90 mmHg or higher after 20 weeks, without signs that pre-eclampsia is affecting the kidneys, liver, blood, brain, or placenta. High blood pressure found before pregnancy or before 20 weeks is more likely to be chronic hypertension.

The term "pregnancy-induced hypertension" has not always been used consistently. Some people use it broadly for several pregnancy-related blood pressure conditions. This article uses it to mean gestational hypertension.

The condition often causes no symptoms. This is why blood pressure is checked at routine pregnancy appointments. It matters because blood pressure can become severely raised, and some people later develop pre-eclampsia. Careful monitoring helps identify changes early.

Symptoms

Most people with gestational hypertension feel well. A raised reading may be the first and only sign. The level of your blood pressure does not always match how unwell you feel.

Symptoms such as the following can suggest severe hypertension or pre-eclampsia rather than uncomplicated gestational hypertension:

Some ankle and foot swelling is common during pregnancy and does not by itself mean that you have pre-eclampsia. A rapid change, especially with other symptoms, needs prompt assessment.

The placenta may not work as well if a pregnancy-related blood pressure condition becomes more serious. This can affect the baby's growth or movements. Contact your maternity unit promptly if your baby's movements decrease or change from their usual pattern.

- A severe or persistent headache
- Blurred vision, flashing lights, or other vision changes
- Strong pain beneath the ribs, especially on the right
- Sudden swelling of the face or hands
- Shortness of breath or feeling suddenly very unwell

Causes and risk factors

The exact cause is not fully understood. It appears to involve changes in how the placenta develops and how blood vessels respond during pregnancy. These changes can increase resistance in the circulation, raising blood pressure.

Gestational hypertension is not caused by stress, ordinary exercise, working, or something you ate. You should not blame yourself if it develops.

It can happen in any pregnancy. Factors linked with a higher chance include:

Having a risk factor does not mean you will develop the condition. Some people develop it without any known risk factor.

- Gestational hypertension or pre-eclampsia in an earlier pregnancy
- A first pregnancy
- A pregnancy involving twins or more babies
- Chronic high blood pressure, kidney disease, or diabetes
- Certain immune conditions, including lupus
- A close family history of pre-eclampsia
- Older maternal age or a higher body mass index

Diagnosis

Your maternity team will first repeat the blood pressure measurement. The cuff must be the correct size, and you should be seated and supported. A single raised reading may be affected by activity, anxiety, pain, or measurement error, so repeated readings are usually needed. Very high readings are reassessed and treated more quickly.

A reading of 140/90 mmHg or higher is considered raised during pregnancy. A reading of 160 systolic or 110 diastolic, or higher, is severe and needs urgent assessment.

Tests are also used to look for pre-eclampsia and to check your baby's well-being. These may include:

Protein in the urine can be a sign of pre-eclampsia. However, pre-eclampsia can sometimes be diagnosed without protein in the urine if there are other signs of organ or placental problems.

If blood pressure remains high more than about 12 weeks after birth, your healthcare team may investigate chronic hypertension or another cause.

- A urine test for protein
- Blood tests for kidney and liver function
- A blood count, including the number of platelets that help blood clot
- Ultrasound scans to check the baby's growth and amniotic fluid
- Monitoring of the baby's heart rate when clinically appropriate

Treatment and management

Management aims to keep blood pressure at a safer level, watch for pre-eclampsia, and allow the pregnancy to continue when it is safe for you and your baby.

You may need more frequent appointments than usual. These can include blood pressure and urine checks, blood tests, questions about symptoms, and monitoring of your baby's growth.

Your team may ask you to check blood pressure at home. Use a monitor validated for pregnancy and a cuff that fits your arm. Record the readings as instructed. Home monitoring supports maternity care but does not replace appointments or assessment of new symptoms.

Blood pressure medicine may be recommended if readings remain raised or become severe. Medicines commonly used during pregnancy include labetalol, nifedipine, and methyldopa. The choice is based on your blood pressure, other health conditions, side effects, and stage of pregnancy. Do not start, stop, or change blood pressure medicine without medical advice.

Magnesium sulfate is not a routine treatment for uncomplicated gestational hypertension. It may be used in hospital to reduce seizure risk when severe pre-eclampsia or eclampsia is present.

Bed rest is not a standard treatment and can increase the risk of blood clots. Your maternity team can advise whether you need to change work, travel, or activity because of your blood pressure or pregnancy circumstances.

Birth ends the pregnancy-related trigger, but blood pressure does not always fall immediately. The timing of birth is planned according to the severity of the hypertension, the presence of pre-eclampsia, the baby's condition, and how many weeks pregnant you are. If you and your baby remain well, close monitoring may allow more time before birth.

Complications

Many people with gestational hypertension have a good outcome, especially when it remains mild and is carefully monitored. Possible complications include:

A history of gestational hypertension also raises the chance of hypertension in a future pregnancy. Over the longer term, it is linked with a higher risk of chronic high blood pressure, heart disease, and stroke. This does not mean these problems are certain to occur.

- Severe hypertension: Very high pressure increases the risk of stroke and other organ injury.
- Pre-eclampsia: This can affect the brain, liver, kidneys, blood clotting, or placenta.
- Placental abruption: The placenta separates from the uterus before birth, which can cause bleeding and threaten the baby.

- Reduced fetal growth: Placental blood flow may be affected, so the baby may grow more slowly.
- Preterm birth: An earlier birth may be advised if continuing the pregnancy becomes less safe.
- Eclampsia: This means seizures related to pre-eclampsia and is a medical emergency.

Prevention

Gestational hypertension cannot always be prevented. Because placental development and individual biology are involved, healthy habits cannot guarantee that it will not happen.

Attending antenatal appointments is important because blood pressure changes may cause no symptoms. If you monitor at home, use the technique and reporting limits given by your maternity team.

Low-dose aspirin may reduce the risk of pre-eclampsia in people with certain risk factors. It is preventive treatment for selected pregnancies, not a treatment to start after a high reading without advice. Take it only when it has been recommended for you.

Before and between pregnancies, managing chronic high blood pressure, diabetes, and other long-term conditions may reduce pregnancy risks. If you already take blood pressure medicine, arrange a medication review when planning pregnancy because some medicines are not used during pregnancy.

Living with it and what to expect

Gestational hypertension can mean extra appointments, home readings, blood tests, and scans. This can be tiring or worrying, even when you feel well. Ask your team how often to check your pressure, which symptoms to report, and whom to contact outside normal hours.

Blood pressure may remain stable, improve, or rise as pregnancy continues. Some people develop pre-eclampsia, while others do not. Symptoms alone cannot show which course the condition is taking, so continue monitoring even when you feel normal.

Gestational hypertension does not automatically mean you need a caesarean birth. Vaginal birth may be possible if you and your baby are well. Continuous monitoring or other changes to your birth plan may be recommended if your pressure is high or medication is needed.

Blood pressure can rise or remain high during the first days after birth. You will continue to need checks, and you may temporarily need medicine. Postpartum pre-eclampsia can also

appear after delivery, including in people whose earlier symptoms were mild.

For most people, blood pressure returns to its previous level within several weeks and by about 12 weeks after birth. If it remains high, further assessment is needed. Arrange the recommended postpartum review even if you feel well.

In later years, tell primary care professionals that you had gestational hypertension. Periodic blood pressure and cardiovascular risk checks can help identify treatable problems early.

When to get medical help

Contact your maternity assessment unit urgently if:

Do not wait for your next routine appointment when these signs occur.

Call emergency services for a seizure, collapse, severe breathing difficulty, chest pain, heavy bleeding, or signs of a stroke such as facial drooping, arm weakness, or trouble speaking.

For routine follow-up, attend all arranged blood pressure checks, blood tests, scans, and postpartum appointments. Contact your maternity team sooner if home readings repeatedly exceed the limit they gave you, even if they are below the severe range.

- A blood pressure reading is 160/110 mmHg or higher
- You have a severe headache that does not settle
- You have blurred vision, flashing lights, or loss of vision
- You have strong pain beneath the ribs or in the upper abdomen
- You develop sudden facial or hand swelling with other symptoms
- You feel suddenly unwell, vomit unexpectedly later in pregnancy, or become short of breath
- Your baby's movements are reduced or different from usual
- You have vaginal bleeding or severe abdominal pain

Common questions

Does pregnancy-induced hypertension mean I have pre-eclampsia?

No. Gestational hypertension means raised blood pressure without the additional findings needed to diagnose pre-eclampsia. However, pre-eclampsia can develop later, so urine tests, blood tests, symptoms, and your baby's growth may be monitored.

Will my baby be okay?

Many babies are born healthy. The main concerns are reduced placental blood flow, slower growth, and the possible need for an earlier birth. Monitoring helps your team identify these problems and decide when birth is safest.

Will I need a caesarean birth?

Not necessarily. High blood pressure alone does not rule out vaginal birth. The decision depends on your blood pressure, whether complications develop, your baby's condition, and the usual obstetric factors.

Does it go away after delivery?

It usually resolves after pregnancy, but not always straight away. Blood pressure can stay high or rise during the first days after birth. If it remains raised beyond about 12 weeks, you may have chronic hypertension that needs further care.

Can pregnancy-induced hypertension happen again?

Yes. Having it in one pregnancy raises the chance of a blood pressure condition in a later pregnancy, although recurrence is not certain. Early pregnancy care allows your history and any preventive treatment to be reviewed.

Can I breastfeed while taking blood pressure medicine?

Often, yes. Several blood pressure medicines can be used while breastfeeding, but not every medicine is suitable. Your postnatal team can choose treatment that considers both blood pressure control and feeding plans.

Sources

- National Institute for Health and Care Excellence. Hypertension in pregnancy: diagnosis and management . NICE guideline NG133, published 2019 and updated 2023.
- American College of Obstetricians and Gynecologists. Gestational Hypertension and Preeclampsia . Practice Bulletin No. 222. Obstetrics & Gynecology . 2020;135:e237-e260.
- Magee LA, Brown MA, Hall DR, and colleagues. The 2021 International Society for the Study of Hypertension in Pregnancy classification, diagnosis and management recommendations for international practice . Pregnancy Hypertension . 2022;27:148-169.
- Garovic VD, Dechend R, Easterling T, and colleagues. Hypertension in Pregnancy: Diagnosis, Blood Pressure Goals, and Pharmacotherapy . American Heart Association scientific statement. Hypertension . 2022;79:e21-e41.

- NHS. High blood pressure (hypertension) and pregnancy . NHS pregnancy guidance.