CONDITION

Eclampsia

Eclampsia is a pregnancy complication that causes seizures, usually alongside preeclampsia.

WHAT IT IS
Pregnancy-related seizures linked to preeclampsia

BODY SYSTEM
Brain, heart and circulation, kidneys, liver, and pregnancy

MAIN SYMPTOMS
Seizure, severe headache, vision changes, upper abdominal pain

WHAT CAUSES IT
Placental dysfunction and abnormal blood vessel responses

HOW IT IS DIAGNOSED
Clinical assessment plus blood, urine, and sometimes brain tests

MAIN TREATMENT
Anti-seizure medicine, blood pressure control, and delivery

CAN IT BE CURED?
Yes - delivery removes the pregnancy trigger

IS IT AN EMERGENCY?
Yes - any suspected eclamptic seizure

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

Overview

Eclampsia is a serious pregnancy complication in which a person has one or more seizures related to preeclampsia. A seizure is a sudden burst of abnormal electrical activity in the brain that may cause loss of consciousness, stiffening, and repeated jerking movements.

Preeclampsia involves high blood pressure and signs that organs such as the kidneys, liver, brain, or blood-clotting system are under strain. Eclampsia can develop when preeclampsia affects the brain.

Most cases happen after 20 weeks of pregnancy, during labour, or after birth. Postpartum eclampsia most often develops in the first few days after delivery, but it can occur several weeks later.

Eclampsia is an emergency because seizures can interfere with breathing, injure organs, and reduce oxygen reaching the baby. Rapid treatment controls seizures and dangerously high blood pressure. Eclampsia can occasionally occur before high blood pressure, protein in the urine, or other warning signs have been recognized.

Symptoms

The main feature is a seizure that cannot be better explained by another condition. It may involve:

Symptoms of severe preeclampsia may occur before the seizure, including:

Swelling alone is common during pregnancy and does not mean someone has eclampsia. Blood pressure may be very high, but symptoms do not reliably indicate its level, and some people have few warning symptoms.

- Sudden loss of awareness or consciousness
- Stiffening of the body
- Rhythmic jerking of the arms and legs
- Confusion, sleepiness, or agitation afterward
- A severe or persistent headache
- Blurred vision, flashing lights, blind spots, or sensitivity to light
- Pain under the right ribs or in the upper abdomen
- Nausea or vomiting later in pregnancy
- Shortness of breath or chest discomfort
- Rapidly increasing swelling or suddenly feeling very unwell

Causes and risk factors

Eclampsia is linked to abnormal development and function of the placenta. This can cause widespread blood vessel changes, inflammation, fluid leakage, and altered blood clotting. When the brain is affected, swelling and disrupted blood flow can trigger a seizure.

Risk is higher in someone with preeclampsia, particularly with severe blood pressure changes, neurological symptoms, abnormal blood tests, or organ injury. However, not every case can be predicted.

Factors associated with preeclampsia and eclampsia include:

Having a risk factor does not mean eclampsia will occur. It can also affect people without an obvious risk factor.

- Preeclampsia or eclampsia in an earlier pregnancy
- Long-term high blood pressure or kidney disease
- Diabetes or certain autoimmune conditions
- Pregnancy with twins or more babies
- A first pregnancy
- A family history of preeclampsia
- Pregnancy at an older maternal age

Diagnosis

Eclampsia is diagnosed from the circumstances of the seizure and clinical assessment. The medical team considers it when a seizure occurs during pregnancy or after birth, especially when there are signs of preeclampsia.

Blood pressure is checked repeatedly. Urine may be tested for protein, and blood tests assess kidney and liver function, red blood cells, platelets, and blood clotting. If the pregnancy is continuing, the baby's heart rate is monitored. Ultrasound may assess growth, amniotic fluid, and placental blood flow.

Clinicians may investigate other causes of seizures, including epilepsy, stroke, a blood clot in the brain, infection, low blood sugar, medication effects, or head injury.

CT or MRI brain imaging may be needed if the presentation is unusual, seizures continue or return despite treatment, consciousness does not recover as expected, or there are signs of stroke. Imaging may show temporary brain swelling known as posterior reversible encephalopathy syndrome, or PRES.

Treatment and management

Treatment begins immediately. During a seizure, priorities are to protect breathing, prevent injury, and obtain emergency medical care.

If you witness a seizure, move hazards away and cushion the person's head if safe. Do not hold them down or put anything in their mouth. Turn them onto their side when possible and note

how long the seizure lasts.

In hospital, magnesium sulfate is the standard medicine used to stop eclamptic seizures and reduce the chance of another. It is used as an anti-seizure treatment, not as a dietary supplement. Other medicines may be required if seizures continue.

Dangerously high blood pressure is treated promptly. Oxygen, intravenous fluids, and breathing support may be needed. Fluids are managed carefully because preeclampsia increases the risk of fluid collecting in the lungs.

Delivery is the definitive treatment for the pregnancy-related trigger, but the medical team first stabilizes the pregnant person whenever possible. Eclampsia does not automatically require a caesarean birth. Timing and method depend on the condition of the pregnant person and baby, labour progress, and gestational age.

Monitoring continues after birth because seizures, high blood pressure, and organ complications may persist or first appear postpartum. Blood pressure medicine may be needed during recovery.

Complications

With rapid treatment, many people recover. Possible maternal complications include injury, breathing problems, aspiration of stomach contents into the lungs, stroke, kidney or liver injury, and fluid in the lungs.

Eclampsia can occur with HELLP syndrome, which involves red blood cell breakdown, liver injury, and low platelets. Blood-clotting problems or separation of the placenta from the uterus may also occur.

During a seizure, the baby's heart rate may slow because oxygen and blood flow are temporarily reduced. Other risks include medically necessary early birth, poor growth, placental separation, and pregnancy loss.

Lasting disability is not inevitable but is more likely after stroke, severe organ injury, or a prolonged shortage of oxygen.

Prevention

There is no guaranteed way to prevent eclampsia. Prevention focuses on identifying and managing preeclampsia before it progresses.

Routine antenatal care includes blood pressure checks and symptom assessment. Urine and

blood tests may be used when preeclampsia is suspected. Postpartum follow-up also matters because blood pressure can rise after delivery.

Low-dose aspirin may be recommended during pregnancy for people with particular risk factors. Calcium supplementation may be advised where dietary calcium intake is low. These measures are not suitable for everyone and should be used only according to maternity guidance.

Managing long-term high blood pressure, diabetes, kidney disease, or autoimmune conditions before and during pregnancy may reduce some risks. Medicines should be reviewed before pregnancy because not all blood pressure treatments are safe during pregnancy.

After previous eclampsia, pre-pregnancy planning and early monitoring in a future pregnancy can help the maternity team respond promptly.

Living with it and what to expect

Eclampsia is usually an acute condition rather than a lifelong seizure disorder. Eclamptic seizures generally stop after the pregnancy and postpartum period. Long-term anti-seizure medicine is not usually needed unless another cause is found.

Recovery depends on the severity of the episode and any complications. Headache, tiredness, weakness, poor concentration, or emotional distress may continue for days or weeks. Blood pressure can remain high after delivery and may require medicine and follow-up.

A seizure, emergency delivery, or separation from a baby receiving specialist care can be traumatic. Anxiety, low mood, sleep problems, or distressing memories deserve attention, and psychological support can be included in postpartum care.

A history of preeclampsia or eclampsia increases the later risk of high blood pressure, heart disease, and stroke, although these are not inevitable. Ongoing primary care should include blood pressure and cardiovascular health checks.

Eclampsia can recur in a future pregnancy, but recurrence is not certain. Risk depends partly on how early and severe the previous condition was and on other health conditions. A review before another pregnancy can clarify prevention and monitoring options.

When to get medical help

Call emergency services immediately if someone who is pregnant or has recently given birth has a seizure. Do the same for loss of consciousness, severe breathing difficulty, signs of

stroke, or a seizure lasting several minutes or followed by another seizure without recovery.

During a seizure, protect the person from injury, turn them onto their side when safe, and do not place anything in their mouth. Stay with them until emergency help arrives.

Seek urgent maternity or emergency assessment for:

These symptoms require urgent assessment even if earlier blood pressure readings were normal.

After discharge, attend all scheduled blood pressure checks. Contact the maternity or primary care team if headaches, swelling, abdominal pain, or blood pressure concerns persist without emergency features.

- A severe or persistent headache
- Blurred vision, flashing lights, or loss of vision
- Severe pain under the right ribs or in the upper abdomen
- Shortness of breath or chest pain
- A home blood pressure reading of 160/110 mmHg or higher
- Heavy bleeding, reduced fetal movement, or feeling suddenly very unwell

Common questions

Can eclampsia happen without preeclampsia?

Eclampsia is considered a severe manifestation of preeclampsia, but preeclampsia may not have been recognized before the seizure. Some people have no previously documented high blood pressure, urine protein, or warning symptoms.

Can eclampsia happen after the baby is born?

Yes. It most often occurs soon after delivery but can develop several weeks later. A new severe headache, vision change, upper abdominal pain, breathing problem, or seizure after birth needs urgent assessment.

Does eclampsia mean I have epilepsy?

Usually not. Eclampsia results from pregnancy-related changes rather than an ongoing tendency to have unprovoked seizures. Further investigation may be needed if seizures continue after recovery or another cause is suspected.

Will delivery stop the seizures immediately?

Delivery removes the pregnancy-related trigger, but the risk does not end immediately.

Seizures and high blood pressure can continue or begin postpartum, so monitoring and anti-seizure treatment remain important.

Will I need a caesarean birth?

Not always. Eclampsia requires delivery after stabilization, but the safest method depends on labour progress, gestational age, and the condition of the pregnant person and baby.

Can I have another pregnancy after eclampsia?

Many people do. A future pregnancy carries an increased risk of preeclampsia, so planning before conception and early antenatal care are recommended. Previous records and current health help determine the monitoring required.

Sources

- American College of Obstetricians and Gynecologists. Practice Bulletin No. 222: Gestational Hypertension and Preeclampsia. Obstetrics & Gynecology . 2020;135:e237-e260.
- National Institute for Health and Care Excellence. Hypertension in pregnancy: diagnosis and management. NICE guideline NG133. Updated 2023.
- World Health Organization. Recommendations for Prevention and Treatment of Pre-Eclampsia and Eclampsia. 2011.
- Magee LA, Brown MA, Hall DR, et al. The 2021 International Society for the Study of Hypertension in Pregnancy classification, diagnosis and management recommendations. Pregnancy Hypertension . 2022;27:148-169.
- The Magpie Trial Collaborative Group. Do women with pre-eclampsia, and their babies, benefit from magnesium sulphate? The Lancet . 2002;359:1877-1890. 08778-0)
- American Heart Association. Hypertension in Pregnancy: Diagnosis, Blood Pressure Goals, and Pharmacotherapy. Hypertension . 2022;79:e21-e41.