

Raised blood pressure in pregnancy: Pre-eclampsia

This leaflet is for those women who have developed high blood pressure and protein in the urine while they are pregnant, whether or not they have abnormal blood tests. It explains what pre-eclampsia is, its risk factors, symptoms, monitoring and treatment in pregnancy. It also tells you what may happen after you have your baby and in subsequent pregnancies.

If you have any questions or concerns, please speak to your midwife or doctor.

What is pre-eclampsia?

Pre-eclampsia is a condition that typically occurs after 20 weeks of pregnancy. It is a combination of:

- raised blood pressure (hypertension)
- protein in your urine (proteinuria)
- fluid retention and swelling (oedema)

The exact cause of pre-eclampsia is not understood.

Often there are no symptoms and it may be picked up at your routine antenatal appointments when you have your blood pressure checked and urine tested. This is why you are asked to bring a urine sample to your appointments.

Why do I need to know if I have pre-eclampsia?

Pre-eclampsia is common, affecting six in 100 women (6%) during pregnancy. It is usually mild and normally has very little effect on pregnancy. However, it is important to know if you have the condition because, in a small number of cases, it can develop into a more serious illness. Severe pre-eclampsia can be life-threatening for both mother and baby.

Around one to two in 100 women (1-2%) develop severe pre-eclampsia during pregnancy. The symptoms tend to occur later on in pregnancy but can also occur for the first time only after birth.

The symptoms of severe pre-eclampsia include:

- severe headache that doesn't go away with simple painkillers
- problems with vision, such as blurring or flashing before the eyes
- severe pain just below the ribs
- heartburn that doesn't go away with antacid medication
- rapidly increasing swelling of the face, hands or feet
- feeling very unwell

These symptoms are serious and you should seek medical help immediately. If in doubt, contact your GP or the maternity triage line of Royal Berkshire NHS Foundation Trust (0118 322 7304).

In severe pre-eclampsia, other organs, such as the liver or kidneys, can sometimes become affected and there can be problems with blood clotting.

Severe pre-eclampsia may progress to convulsions or seizures before or just after the baby's birth. These seizures are called eclamptic fits and are rare, occurring in only one in 4000 pregnancies.

How may pre-eclampsia affect my baby?

Pre-eclampsia affects the development of the placenta (afterbirth), which may prevent your baby growing as it should. There may also be less fluid around your baby in the womb. If the placenta is severely affected, your baby may become very unwell. In some cases, the baby may even die in the womb. Monitoring aims to pick up those babies who are most at risk.

Who is at risk of pre-eclampsia and can it be prevented?

Pre-eclampsia can occur in any pregnancy but you are at higher risk if:

- your blood pressure was high before you became pregnant
- your blood pressure was high in a previous pregnancy
- you have a medical problem such as kidney problems or diabetes or a condition that affects the immune system, such as lupus

If any of these apply to you, you should be advised to take 150mg of aspirin once at night from 12 weeks of pregnancy until 36 weeks to reduce your risk, or sooner if you have been advised to do so.

The importance of other factors is less clear-cut, but you are more likely to develop pre-eclampsia if more than one of the following applies:

- this is your first pregnancy
- you are aged 40 or over
- your last pregnancy was more than 10 years ago
- you are very overweight – a BMI (body mass index) of 35 or more
- your mother or sister had pre-eclampsia during pregnancy
- you are carrying more than one baby

If you have more than one of these risk factors, you may also be advised to take low-dose aspirin once a day from 12 weeks of pregnancy, or earlier if you have been advised to do so.

How is pre-eclampsia monitored?

If you are diagnosed with pre-eclampsia, you should attend hospital for assessment.

While you are at the hospital, your blood pressure will be measured regularly and you may be offered medication to help lower it. Your urine will be tested to measure the amount of protein it contains and you will also have blood tests done. Your baby's heart rate will be monitored and you may have ultrasound scans to measure your baby's growth and wellbeing.

What happens next in mild to moderate pre-eclampsia?

You will continue to be monitored closely to check that you can safely carry on with your pregnancy. This will be done on an outpatient basis when you have mild pre-eclampsia. We will not recommend early delivery unless there are concerns about you or your baby. If there are concerns you will need to have labour induced or, if you are having a Caesarean section, to have it earlier than planned.

When you have moderate pre-eclampsia we will continue to monitor you closely as an inpatient to check that you can safely carry on with your pregnancy. We might recommend early delivery but the timing and the mode of the delivery will depend on your own particular situation.

Treatment includes medication (either tablets or via a drip) to lower and control your blood pressure.

What happens if I develop severe pre-eclampsia?

If you develop severe pre-eclampsia, you will be cared for by a specialist team. The only way to prevent serious complications is for your baby to be born. Each pregnancy is unique and the exact timing will depend on your own particular situation. This should be discussed with you. There may be enough time to induce your labour. In some cases, the birth will need to be by Caesarean section.

Treatment includes medication (either tablets or via a drip) to lower and control your blood pressure. You will also be given medication to prevent eclamptic fits if your baby is expected to be born within the next 24 hours or if you have experienced an eclamptic fit.

You will be closely monitored on the labour ward. In more serious cases, you may need to be admitted to an intensive care or high dependency unit.

What happens after the birth?

Pre-eclampsia usually goes away after birth. However, if you have severe pre-eclampsia, complications may still occur within the first few days and so you will continue to be monitored closely. You may need to continue taking medication to lower your blood pressure.

If your baby has been born early or is smaller than expected, he or she may need to be monitored in special care neonatal unit (SCBU/NICU). There is no reason why you should not breastfeed your baby if they are on this unit should you wish to do so.

When can I leave hospital?

You can leave hospital once your symptoms have settled, your blood tests are improving and your blood pressure has returned to normal (140/90 or below without medication; 150/100 or below with medication). This is usually three to five days after your baby is born.

When you go home, you will be advised on how often to get your blood pressure checked and for how long to take your medication.

You should have a follow-up with your GP 6–8 weeks after birth for a final blood pressure and urine check.

If you had severe pre-eclampsia or eclampsia, you should have a postnatal appointment with your obstetrician to discuss the condition and what happened. If you are still on medication to treat your blood pressure 6 weeks after the birth, or there is still protein in your urine on testing, you may be referred to a specialist.

Will I get pre-eclampsia in a future pregnancy?

Overall, one in six women (16%) who have had pre-eclampsia will get it again in a future pregnancy.

One in three women (33%) will get pre-eclampsia in a future pregnancy if their baby needed to be born before 34 weeks of pregnancy.

You should be given information about the chance, in your individual situation, of getting pre-eclampsia in a future pregnancy and about any additional care that you may need. It is advisable to contact your midwife as early as possible once you know you are pregnant again.

Further information

NICE guidance Hypertension in Pregnancy: diagnosis and management (June 2019). You can find NICE guidance online at: <https://www.nice.org.uk/guidance/ng133>

Further information is also available on the Action on Pre-Eclampsia website <https://action-on-pre-eclampsia.org.uk/public-area/high-blood-pressure-in-pregnancy/#resources>

More information is available on the Trust website: www.royalberkshire.nhs.uk

This document can be made available in other languages and formats upon request.

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