

Pre-eclampsia

Information for patients



What is pre-eclampsia?

Pre-eclampsia affects about 5% of pregnancies and is severe in about 1 - 2% pregnancies. It is a complication that can affect women, usually in the second half of pregnancy (from around 20 weeks), in labour, or soon after the baby is delivered. It causes raised blood pressure and protein in the urine. Although we do not know the exact cause, research suggests that it is due to a problem with the afterbirth (placenta). This is the attachment between your baby and your womb, and provides the nutrients and oxygen to your baby. In pre-eclampsia, the placenta can't get as much blood from you as it needs and this affects you and your baby in different ways.

Pre-eclampsia carries risks for you and your baby so it is important to diagnose the condition early. Some women have risk factors that increase their chances of developing pre-eclampsia which will have been identified at your booking appointment with your midwife.

What are the symptoms of pre-eclampsia?

Early signs of pre-eclampsia include having a high blood pressure or protein in the urine. You will not normally be able to feel this but they should be picked up during your antenatal appointments. It is important that you bring a urine sample to every antenatal appointment with you so that it can be checked for protein.

In some cases, further symptoms can develop. These include:

- Severe headaches that do not go away
- Vision problems such as blurred vision, flashing lights or spots in front of your eyes

- Swelling of the feet, ankles face and hands caused by fluid retention. It is normal to have some swelling in the feet and ankles in pregnancy but if this suddenly gets worse, you should report this to your doctor or midwife
- Pain under the ribs, especially on the right side
- Not feeling your baby move as much - you should always contact the antenatal day unit or maternity assessment centre if you notice this

What increases your risk for developing pre-eclampsia?

There are a number of factors that can increase your risk for pre-eclampsia. You will have a higher risk of developing pre-eclampsia if:

- You have high blood pressure before the start of your pregnancy or during a previous pregnancy, or if you have previously had pre-eclampsia
- You have Type 1 or Type 2 diabetes
- You have chronic kidney disease
- You have an autoimmune disease such as systemic lupus erythematosus or antiphospholipid syndrome

You will have a moderately increased risk if:

- This is your first pregnancy or it has been more than 10 years since your last one
- You are age 40 or more
- You have a body mass index (BMI) of 35 or more
- You have a pregnancy, with twins or triplets

- Your mother or sister has had pre-eclampsia

What are the complications of pre-eclampsia?

Serious complications of pre-eclampsia are very rare.

They include:

- Eclampsia: this is a type of seizure, which can be life threatening. Less than one in 100 women with pre-eclampsia will develop eclampsia
- HELLP syndrome: this stands for Haemolysis (breakdown of red blood cells), Elevated Liver enzymes (which means the condition is affecting the liver) and Low Platelets (platelets are a type of cell in the blood that are important in clotting; if these are low, it becomes difficult for the body to stop bleeding). We can monitor for the development of HELLP syndrome using simple blood tests
- Bleeding in to the brain (stroke) can result from uncontrolled high blood pressure. Treatment with anti-hypertensives (blood pressure lowering medication) aims to prevent this
- Pre-eclampsia can affect the function of the kidneys, the liver and the lungs
- Severe bleeding from the afterbirth (placenta)

There are also risks to the baby from pre-eclampsia:

- On average, babies of mothers with pre-eclampsia tend to be smaller
- There is an increased risk of premature birth and stillbirth

What is the treatment for pre-eclampsia?

Treatment during your pregnancy is targeted at reducing the blood pressure and prolonging the pregnancy. This is done with anti-hypertensives such as labetalol, nifedipine or methyldopa. These have all been extensively used in pregnancy and are considered safe. Labetalol is the most commonly used medication; however, it has been associated with low blood sugars in the newborn baby. Your baby will; therefore, need to be monitored for the first 24 hours after delivery but should not have any longer term problems as a result of the labetalol.

Frequent checks of blood pressure and the protein levels in the urine are required to monitor the progress of the condition. This may require that you attend antenatal day unit two or three times per week, and have blood tests done regularly. If your blood pressure becomes difficult to control or if you develop significant symptoms, you may need to be admitted to hospital where your medication can be adjusted, until your blood pressure is back under control.

It is also important to monitor the baby and extra ultrasound scans of your baby will be done to make sure he or she is growing well. If doctors feel there is a chance your labour will need to be induced, or that you will need a caesarean section and your baby is still premature, steroid injections may be recommended to help mature the baby's lungs.

Magnesium sulphate is an anti-convulsant (it stops you having a seizure). In women with severe pre-eclampsia, it reduces the risk of seizures (eclampsia). It is usually given as a drip for 24 hours around the time of delivery. There is good evidence showing it does not harm the baby and actually may provide some benefit to the baby.

The only cure for pre-eclampsia is delivery of the baby and the afterbirth. If you develop a complication of pre-eclampsia or your baby is not growing well, it may be necessary to induce your labour early.

There are a number of things to consider when deciding on the best time to deliver your baby including:

- The severity of your condition, including your risks of developing serious complications
- How severely your baby is affected
- The chances of your baby doing well if they are born prematurely. Generally, the later in your pregnancy your baby is born, the better; however, if your pre-eclampsia is causing the baby to grow poorly, then they may do better if they are born, even if they are premature

Any decision about delivery will be discussed with you. Even in milder cases, we may recommend that your baby is born between 37 - 38 weeks, and in some cases, delivery may have to be by caesarean section.

What happens after the baby is born?

Following delivery, you may need to remain in hospital for a few days to make sure your blood pressure is safely under control before you can go home, this may be 24 - 48 hours; or longer in severe cases. Full recovery may take up to 6 weeks and you may need to remain on anti-hypertensive medication for a while, following delivery.

Anti-hypertensive drugs should not be stopped without close medical supervision and this should usually be done gradually.

If the hypertension does not eventually disappear after the birth, the condition may be diagnosed as non-pregnancy hypertension which may require treatment to control cardiovascular problems in later life.

Some women may still need antihypertensive treatment in the postnatal period and the following antihypertensive drugs have no known adverse effects on babies receiving breast milk: labetalol, nifedipine, enalapril, captopril, atenolol, metoprolol. Methyldopa is usually stopped or changed to an alternative in the immediate postnatal period.

Can pre-eclampsia be prevented?

There is some evidence to suggest that low dose aspirin (75 mg once a day), from an early stage of pregnancy, may reduce the chances of developing pre-eclampsia in women who are at a high risk for the condition. Your midwife will perform a full check at booking and if you have certain risk factors, your doctor may recommend low dose aspirin treatment.

In summary:

- Pre-eclampsia is a disease of pregnancy, probably caused by a problem in the afterbirth (placenta)
- It causes high blood pressure and protein in the urine. These are checked at every antenatal appointment; it is important to bring a urine sample with you to each visit
- If you have significant risk factors, low dose aspirin may be recommended as a preventative treatment
- Make sure you are familiar with the symptoms of worsening pre-eclampsia - severe headache; visual disturbances; sudden swelling of your hands, feet or face

- If you develop pre-eclampsia, you may need frequent monitoring - up to three times a week in antenatal day unit - and regular blood tests to make sure you are not developing serious complications. You may need to be admitted to hospital if your blood pressure is not well controlled
- It can affect your baby's growth. If this is severe, or you are developing serious complications, you may need to have labour induced early

Where can I find more information?

Action on Pre-eclampsia. Why blood pressure and urine are tested during pregnancy 2012.

Hypertension in Pregnancy. NICE clinical guideline CG107, November 2010.

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