

PRE-ECLAMPSIA

What is it?

Pre-eclampsia is the most common complication associated with pregnancy. Women with pre-eclampsia have high blood pressure, protein in their urine, and may develop other symptoms and problems. The more severe the pre-eclampsia, the greater the risk of serious complications to both mother and baby.

Alternative names are:

- Pre-Eclamptic Toxaemia (PET)
- Toxaemia
- EPH Gestosis
- Metabolic Toxaemia of Late Pregnancy.

Why does it happen?

The exact cause of pre-eclampsia is unknown, but it is thought to be caused by a defect in the placenta (which joins mother and baby and supplies the baby with nutrients and oxygen from the mother's blood). It is thought that the blood vessels in the placenta do not develop properly which affects the transfer of nutrients and oxygen to the baby.

Pre-eclampsia can also affect various other parts of the mother's body. Substances released from the placenta go around the body and can damage blood vessels in the mother's body, making them leak.

Any pregnant woman can develop pre-eclampsia, usually after 20 weeks of pregnancy. It occurs in about 1 in 14 pregnancies. However, there is an increased risk of developing pre-eclampsia if the mother:

- is pregnant for the first time, or is pregnant for the first time by a new partner
- has had pre-eclampsia before
- has a family history of pre-eclampsia
- had high blood pressure before the pregnancy started
- has diabetes, systemic lupus erythematosus (SLE), or chronic (persistent) kidney disease
- is aged below 20 or over 35
- has a pregnancy with twins, triplets, or more
- is obese.

What are the symptoms?

The severity of pre-eclampsia is usually related to the blood pressure level. Women may have no symptoms at first, or may experience mildly raised blood pressure and a small amount of leaked protein in their urine.

If pre-eclampsia becomes worse, one or more of the following symptoms may develop:

- headaches
- blurring of vision, or other visual problems
- abdominal pain (the pain that occurs with pre-eclampsia tends to be mainly in the upper part of the abdomen, just under the ribs)
- vomiting
- swelling or puffiness of feet, face, or hands (oedema). However, this is also common in normal pregnancy. Most women with this symptom do not have

pre-eclampsia, but it can become worse in pre-eclampsia. Therefore, report any sudden worsening of swelling of the hands, face or feet promptly to your doctor or midwife.

It should be noted that higher than normal blood pressure is quite common in pregnancy. About 1 in 5 women with mild high blood pressure go on to develop pre-eclampsia. It is therefore important to have regular ante-natal check-ups.

Associated Complications

Most women with pre-eclampsia do not develop serious complications. The risks increase if the pre-eclampsia becomes more severe. Complications for the mother can include:

- eclampsia (see separate sheet)
- liver, kidney, and lung problems
- blood clotting disorder
- stroke (bleeding into the brain)
- severe bleeding from the placenta
- HELLP syndrome (Haemolysis, Elevated Liver enzymes and Low Platelets). Haemolysis means that the blood cells start to break down. Elevated liver enzymes means that the liver has become affected. Low platelets means that the number of platelets in the blood is low and you are at risk of serious bleeding problems.

Complications for the baby include:

- reduced nutrients and oxygen received through the placenta
- increased likelihood of being smaller than average
- increased risk of stillbirth.

About 10 women, and several hundred babies, die each year in the UK from the complications of severe pre-eclampsia. The risk of complications is reduced if pre-eclampsia is diagnosed early and treated.

Treatment

Pre-eclampsia is detected through blood pressure and urine tests.

Regular checks may be all that you need if pre-eclampsia remains relatively mild. If pre-eclampsia becomes worse, hospital admission is more likely. Tests may be done to check on the mother's well-being, and that of the baby, for example, blood tests to check on the function of the mother's liver and kidneys. Also, an ultrasound scan is usual to see how well the baby is growing.

The only complete cure for pre-eclampsia is to deliver the baby. At delivery the placenta (often called the afterbirth) is delivered just after the baby. Therefore, the cause of the condition is removed. After the birth, the blood pressure and any other symptoms in the mother usually soon settle.

It is common practice to induce labour if pre-eclampsia occurs late in the pregnancy. A caesarean section can be done if necessary. The risk to the baby is small if he or she is born just a few weeks early. However, a difficult decision may have to be made if pre-eclampsia occurs earlier in the pregnancy.

The best time to deliver the baby has to balance several factors which include:

- the severity of the condition in the mother, and the risk of complications occurring
- how badly the baby is affected
- the chance of a premature baby doing well. As a rule, the later in pregnancy the baby is born, the better. However, some babies grow very poorly if the placenta does not work well in severe pre-eclampsia. They may do much better if they are born, even if they are premature.

As a rule, if pre-eclampsia is severe, then delivery sooner rather than later is best. If the pre-eclampsia is not too severe, then postponing delivery until nearer full-term may be best.

Until the baby is delivered, other treatments may be considered, such as:

Magnesium sulphate

Studies have shown that if mothers with pre-eclampsia are given magnesium sulphate, it roughly halves the risk of developing eclampsia. Magnesium sulphate is an anticonvulsant (typically used to treat seizures, such as epilepsy). It does not affect the baby, and the risk of serious consequences to the mother are much reduced. Magnesium sulphate is used mostly in women with severe pre-eclampsia where there is a greater risk of developing eclampsia. Magnesium sulphate is given for about 24-48 hours by a 'drip' (a slow infusion directly into a vein). It is usually given around the time of delivery.

Medication to reduce blood pressure

This may be an option for a while if pre-eclampsia is not too severe. If the blood pressure is reduced it may help the pregnancy to progress further before delivery of the baby.

Rest

Although often advised, there is little evidence that this makes a significant difference. However, it is common practice to admit women with pre-eclampsia to hospital, particularly if it is severe. This is not just for rest, but also to monitor the mother and developing baby.

Future Pregnancy

Women who had pre-eclampsia in their first pregnancy have a 1 in 10 chance of having it in future pregnancies.

Women who did not have pre-eclampsia in their first pregnancy are unlikely to develop it in later pregnancies with the same partner.

Prevention of pre-eclampsia is difficult but some specialists might recommend a regular low dose of aspirin and calcium supplements which may help (only to be taken on the advice of a specialist).

Further Information:

The Pre-Eclampsia Society (PETS) which provides information and support for women with pre-eclampsia and is run by women who have had the condition themselves.

Helpline: 01286 882685

Website: www.pre-eclampsia-society.org.uk

APEC (Action on Pre-EClampsia) which aims to inform and educate parents and health professionals about pre-eclampsia, to support sufferers and their families (through a network of local befrienders), and to promote medical research into the condition.

Helpline: 020 8427 4217

Website: www.apec.org.uk

This information sheet was written and edited in accordance with the Babyloss editorial policy.

Last reviewed: July 2009

Please read the disclaimer at www.babyloss.com for the terms of use of the information provided here.