Prevention and treatment of venous thrombosis during pregnancy

Patient information leaflet
**What is thrombosis?**

Thrombosis occurs when a blood clot forms in a blood vessel, either a vein or an artery (the clot is called a thrombus; the process is thrombosis).

This leaflet is about venous thrombosis that occurs in veins (the blood vessels that return the blood back towards the heart and lungs). Normal activities and body movements aid blood flow back to the heart.

When a clot forms in one of the deep veins in your leg, thigh, pelvis or arm it is known as a deep vein thrombosis (DVT). The blood clot itself is not life threatening but may cause long term damage to your veins. If it comes loose it can be carried in your blood to another part of your body where it can cause more serious problems. A blood clot that has travelled to the lung is called a pulmonary embolism (PE).

The signs and symptoms of a DVT or pulmonary embolism (PE) may include:

- pain and tenderness or swelling of the leg when standing or walking or it may just feel heavy,
- the skin on the leg becoming hot or discoloured (red, purple or blue),
- the veins near the surface of your legs appear larger than normal or you may notice them more,
- becoming short of breath,
- feeling pain in the chest, upper back or ribs which gets worse when you breathe in deeply,
- coughing up blood.

You should contact your midwife or doctor immediately if any of these symptoms develop.

**Who is at risk of venous thrombosis?**

Pregnant women are ten times more likely to develop venous thrombosis than women of the same age who are not pregnant. Venous thrombosis related to pregnancy can occur at any stage of the pregnancy and for up to six weeks after the birth of your baby. This increased risk is due to physiological changes in your body such as:
• an increase in blood volume,
• blood flow in the legs slows down because of pressure from the weight of a heavy uterus upon the blood vessels,
• hormonal changes of pregnancy altering the clotting mechanism within the blood.

You are at additional risk if you
• smoke,
• have had a previous thrombosis or have a family history of thrombosis,
• have a known risk for thrombosis because of thrombophilia,
• are over 35 years of age,
• are overweight with body mass index (BMI) over 30,
• have severe pre-eclampsia,
• have a caesarean section,
• have excess blood loss or blood transfusion,
• are admitted to a critical care unit,
• are dehydrated,
• are immobile for long periods of time,
• have had an operation in the last 12 weeks,
• have longstanding problems with your heart or lungs,
• have inflamed varicose veins (phlebitis),
• have certain other health problems for example inflammatory bowel disease or rheumatic conditions,
• undertake prolonged travel such as long haul airplane flights,
• are in a car or train travel for four hours or longer.

When will the risk be assessed?
Your midwife or obstetrician will assess your level of risk
• during early pregnancy,
• if your health changes during pregnancy,
• after the birth of your baby.
If necessary, your midwife or obstetrician will advise you of any treatment required to reduce your risk of thrombosis.

What is the treatment to reduce the risk of venous thrombosis?
If your doctor suspects you are at high risk of developing a blood clot you will be advised to start on preventative treatment with a low dose injection of heparin
What treatment is given if venous thrombosis occurs?
If your doctor suspects you have had a venous thrombosis you will be advised to start on treatment with a higher dose injection of heparin.
Graduated elastic compression stockings may also be offered to help reduce swelling in the leg and improve the circulation.

What does heparin treatment involve?
Heparin is given as an injection under the skin at the same time every day. You or a family member will be shown how and where in your body to do the injections. Support and training will be provided by the community midwife. You will be given the necessary equipment with the pre-filled syringes and needles, and advised on how to store and dispose of these. Alternatively the community midwife may administer the injections.

How long will I need to take heparin?
The length of preventative treatment will depend on the level of your risk. If you have had a caesarean section you will normally require treatment for 7 days after the operation. There may be some bruising where you inject, which will usually fade in a few days. One or two women in every 100 (1-2%) will have an allergic reaction when they inject heparin. If you notice a rash after injecting, you should inform your doctor.
Heparin is widely used in pregnancy and is not thought to pose a risk to you or your baby’s health.

What can help prevent a blood clot?
- stay as active as you can,
- avoid periods of long immobility,
- stop smoking,
- drink plenty of fluids to avoid becoming dehydrated,
- you may be prescribed and fitted with special stockings to help prevent thrombosis.
What should I do when labour starts?

If you are on heparin injections and you think labour has started do not take any more injections. Contact the midwife on delivery suite and tell her you are on heparin treatment. Most women on heparin can have a normal labour, except that an epidural cannot be administered until 12 hours after your last injection. Alternative pain relief will be discussed with you.

What if I have a planned caesarean section?

If you are on heparin injections your last injection should be 24 hours before the planned operation. If an emergency caesarean section is required less than 12 hours from your heparin injection you will not be able to have an epidural or spinal anaesthetic. You will require a general anaesthetic instead. Your heparin injections will usually be restarted after delivery.

What happens after vaginal delivery?

If you are on heparin injections they will be started as soon as possible after delivery.

Can I breastfeed?

Heparin is widely used when mothers are breastfeeding and is thought to be safe.
Where can I find more information?
If you have any questions about the information in this leaflet you should discuss these with your midwife or obstetrician

Useful contact numbers
Delivery suite  0161 291 2945
Triage  0161 291 2724
Antenatal clinic  0161 291 2951

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