Excellence in rural healthcare

NHS
United Lincolnshire Hospitals
NHS Trust

Deep vein thrombosis and pulmonary embolism in pregnancy

Maternity Services
Lincoln County Hospital (01522) 597672
Pilgrim Hospital (01205) 446106
Grantham Hospital (01476) 464341
www.ulh.nhs.uk

2021
A different Lincolnshire
A great ULHT

Aim of the leaflet

This leaflet aims to inform pregnant and postnatal women about deep vein thrombosis (DVT) and pulmonary embolus (PE).

What is a deep vein thrombosis?

Deep vein thrombosis is a serious condition where clots develop, often in the deep veins of the legs. It can be fatal if the clot travels from the legs to the lungs. The risk may increase if you are on a long-haul flight (over five hours), where you sit still for a long time.

How can I help prevent a blood clot in pregnancy?

You can reduce your risk of developing a blood clot by:

- Not smoking
- Staying mobile
- Maintaining a healthy weight
- Maintaining good hydration

If you are considered high risk for developing a DVT your doctor may advise low weight molecular weight heparin (LWMH) injections and anti-embolism stockings to reduce this risk.

When to get help

If you develop swollen and painful legs or have breathing difficulties, go to your GP or your nearest accident and emergency department immediately.

If you are considered at high risk of developing a deep vein thrombosis, your obstetrician may suggest you have preventative treatment with anticoagulant therapy.

How is a deep vein thrombosis diagnosed?

If a blood clot is present in your leg it can be detected by ultrasound (Doppler). This procedure is very similar to the scan you have to look at your baby. Sometimes a 'venogram' is needed for a more accurate diagnosis. This involves a dye being injected into a vein in your foot followed by an x-ray. This will detect any blockage in the flow of dye through your veins.

What are the risks of having an x-ray to your baby?

An x-ray is only performed when absolutely necessary and a lead apron will be provided to shield you and your baby from any radiation. Risks imposed by the x-ray are extremely low when compared to overall lifetime risks. It is important to remember that risks occur in everyday life.

The benefits of an accurate diagnosis far outweigh the risks posed by having an x-ray examination.

What is a pulmonary embolus?

Sometimes part of the blood clot in your veins 'breaks off' and travels to your lungs. This is known as a pulmonary embolus (PE). If the blood clot is big this can be very serious. The treatment that you are given when a DVT is diagnosed will help to prevent a PE.

Symptoms of a pulmonary embolus are often sharp chest pains and shortness of breath. If this happens seek medical help immediately.

Usually a deep vein thrombosis is diagnosed before a pulmonary embolus occurs. Occasionally the first indication of a problem can be chest symptoms caused by a pulmonary embolus.

How is a pulmonary embolus detected?

If a pulmonary embolus is suspected, you may need a scan of your lungs to help the diagnosis. This is carried out in two stages.

Firstly, a weak radioactive substance is injected into your arm and a special camera is used to see how this is distributed through the blood vessels in your lungs. A normal result means you have not had a pulmonary embolus.

If the test looks unusual a second stage is needed. This involves you breathing in a radioactive gas, which the camera can detect in your airways.

What are the radiation risks to you and your baby?

We are all exposed to radiation; it comes from the sun, the food we eat, building materials and natural surroundings like earth and rocks. The amount of radiation varies in different parts of the country.

There is no difference from receiving this extra radiation in a short time from a scan or over a longer period from background radiation.

It is important to know for sure if you have had a pulmonary embolus, because of the implications for short term (during this pregnancy) and long term (your future pregnancies). So the small risks to you and your baby are much less than the risks of not treating a thrombosis, or of unnecessarily treating when there is no blood clot.

How is a blood clot treated?

Deep vein thrombosis and pulmonary embolus are treated with anticoagulant drugs, such as heparin and warfarin. These drugs slow down formation of the clot. This is sometimes referred to as 'thinning the blood'. Treatment usually starts with heparin, which is injected into the fatty tissue under your skin, usually twice a day. You will be taught how to self administer, if necessary.

You will need anticoagulation treatment for a full six months in order to disperse the blood clot and to prevent further clots forming. After your baby is born, the heparin could be changed to warfarin, which is given in tablet form. The tablets are colour-coded according to their strength. Each person responds differently to this medication and therefore you will require regular blood tests to determine the right dose for you.

What are the side effects of treatment?

As heparin and warfarin interfere with the blood's clotting mechanisms, they increase the risk of bleeding. Any unusual or excessive bleeding should be reported immediately.

Heparin may also cause thinning of the bones (known as osteoporosis), especially if used for a long time and in large doses. Your bones will return to normal when the treatment is completed. Very rarely fractures of bones have been reported, therefore, it is important that you report any unusual pains to your doctors.

Side effects of warfarin are unusual. However, as it can pass across the placenta it may cause damage to a developing baby in the early stages of pregnancy. It is therefore very important that you do not become pregnant whilst you are taking warfarin. We will discuss reliable methods of contraception with you.

What are the risks of treatment to the baby?

Heparin does not cross the placenta and does not harm the baby. Warfarin may be harmful to your baby. You will only be prescribed warfarin during pregnancy if it is absolutely necessary and it will, of course, be discussed with you first.

Can I get another clot?

Yes. When one clot has occurred there is a higher chance of another as your veins have been damaged. It is important that you do all you can to reduce the risks of another clot. A healthy diet, avoidance of smoking and taking gentle exercise will help to reduce this risk.

Can I still have an epidural during labour?

Your plan of care for the birth will be discussed with you as you near term - at about your 8th month of pregnancy.

If your birth is planned in advance, then it will often be possible to allow the anticoagulation effects of heparin to wear off sufficiently to make an epidural safe. If you go into labour spontaneously then the clotting status of your blood will need to be checked before a decision can be made about having an epidural.

If you need an emergency Caesarean Section we may have to offer you a general anaesthetic. You may remain on treatment for up to six weeks after the birth of your baby.

References

Sources of information used in the preparation of this leaflet.

Routine postnatal care of women and their babies NICE (2006)

Royal College of Obstetricians & Gynaecologists Thrombosis and Embolism during Pregnancy and the Puerperium, Reducing the Risk (Green-top Guideline No. 37a) 2015

Royal College of Obstetricians & Gynaecologists Diagnosis and treatment of venous thrombosis in pregnancy and after birth 2015

NHS Choices Deep vein thrombosis (DVT) in pregnancy 2018

Contact details

If you have any questions about any of the information contained in this leaflet please contact the maternity services:

Lincoln County Hospital	(01522) 597672
Pilgrim Hospital	(01205) 446106
Grantham Hospital	(01476) 464341

The Trust endeavours to ensure that the information given here is accurate and impartial.

If you require this information in another language, large print, audio (CD or tape) or braille, please email the Patient Information team at patient.information@ulh.nhs.uk

2021
A different Lincolnshire
A great ULHT

Issued: June 2019
Review: June 2021
ULHT-LFT-0041 Version 7