Horton General Hospital

Deep Vein Thrombosis (DVT) and Pulmonary Embolism (PE)

Information for patients
What is a Deep Vein Thrombosis (DVT)?

A DVT is a blood clot which forms in a deep vein, usually in a deep leg vein. This is a larger vein that runs through the muscles of the calf and thigh.

What is a Pulmonary Embolism (PE)?

A PE occurs when the artery that carries blood to the lungs becomes blocked. The blockage is usually a blood clot, although it can be a fat particle, an air bubble, cholesterol or, rarely, amniotic fluid that has leaked into a vein during labour. A PE may also develop when a blood clot breaks free from a DVT and travels to the lungs.

Information about the DVT service

This is a service for the diagnosis and treatment of DVT and PE. You are likely to have been referred here by your General Practitioner (GP) or through the Emergency Department (ED).

Your GP will give you a letter, which you should give to the receptionist when you arrive. You are likely to be in the department all day to have the assessments carried out, so you may want to bring a friend or relative with you to keep you company. You may also be able to leave the department for refreshments while you are waiting for results, but please check with the nurse first, in case they need you to stay.

As this is an emergency service, you may have to wait if an emergency case comes in. If you are found to have a DVT or PE you may also need to stay longer, to have further tests or investigations.
What will happen at the appointment?

When you arrive you will be shown to the waiting area. You will be seen by our Assistant Practitioner (AP) first. The AP will make an initial assessment to find out if you are likely to have a DVT. They will ask you questions about your symptoms and medical history.

You will then have some routine tests, which will include taking your blood pressure, pulse, temperature, and an electrocardiogram (ECG) to measure the activity of your heart. We will also carry out a finger prick to check your blood sugar level and will take a small amount of blood for testing. These blood tests can sometimes tell us whether you have a DVT.

You may have an ultrasound scan or CTPA (computerised tomography pulmonary angiogram). These are specialised scans that show up the blood flow in and around the blood vessels.

Ultrasound scan

If the blood test doesn’t confirm whether you have a DVT, you will have an ultrasound scan. The upper part of your leg is likely to be scanned, even if your symptoms are in your lower leg. This is because clots that develop above the knee are the important ones that need to be treated. Symptoms in your lower leg could be caused by a clot in your upper leg.

If your first ultrasound shows that you do not have a clot in your upper leg, you may still need to come back after one week for another scan.
CT scan

We may also recommend that you have a CT or CTPA scan. This will depend on your medical history and whether there is a chance of a clot either in your chest or abdomen. Before the scan you may need to change into a hospital gown and remove anything metal, as this interferes with the scanning equipment.

During the CT scan you will need to lie flat on your back. The CT scanner is an X-ray tube that rotates around your body. It is usually described as looking like a large donut. The bed will be moved in and out of this tube. The Radiology staff will explain what will happen during the scan in more detail to you, before it begins.

You will usually have a special dye called contrast medium injected into a vein in the back of your hand or forearm before this scan. Contrast medium is a liquid which contains a dye that helps to show up certain parts of the body or blood vessels on X-ray images. When you are given the contrast medium it may make you feel warm all over and can make you feel like you need to urinate.

The scan usually takes about 15-30 minutes and you will return to the Emergency Assessment Unit (EAU) to wait for the results.
What if I don’t get a scan on the same day?
If you are referred to us in the afternoon you may not get your scan until the following day. Whilst you are waiting, you may be given an anticoagulant injection. Anticoagulants are used to treat DVT and PE and may be given to you before your scan in case you do have a DVT or PE.

What happens if I am diagnosed with a DVT or PE?
If you have a confirmed DVT or PE you will need to come back daily for treatment with anticoagulants, unless you are prescribed rivaroxaban or apixaban. You will be seen by a doctor, who will discuss the appropriate anticoagulation treatment with you.

Rivaroxaban and apixaban
If you are prescribed rivaroxaban or apixaban you will not need to come back to the Emergency Assessment Unit for daily injections or blood test monitoring.

You will be given this medication to take twice a day for the first three weeks and then once a day for the remainder of the treatment. You will be given a supply to complete the first phase of treatment.

We will then refer you to the DVT clinic to explain how we will treat your DVT and how the medications work. You will also be given the supply of rivaroxaban or apixaban for the second phase of treatment. You will be reviewed after three months by the anticoagulation team, who will telephone you to discuss your treatment and arrange a follow-up appointment.
Warfarin

Warfarin works by making blood take longer to clot. Warfarin should be taken once a day at the same time each day. If you take the wrong dose, please contact the DVT service as soon as possible for advice (within 24 hours).

When taking warfarin you will need to have a regular blood test to check your International Normalised Ratio (INR). This measures how long it takes your blood to clot.

We will adjust the dose of your warfarin, depending on your INR result. We will aim to keep your INR within a set level, to provide effective treatment – this is called the therapeutic range. The doctors should tell you what your therapeutic range is.

You will also receive a daily injection of a drug called dalteparin, which rapidly thins the blood and helps to prevent blood clots from forming or getting bigger.

When you start warfarin you will have to come to the DVT service every day for an INR check and the dalteparin injection, until your INR is in your therapeutic range. When it has been in your therapeutic range for two consecutive days the dalteparin injections will stop. You will then be referred to the anticoagulation clinic in the pathology laboratory at the Horton General Hospital, to continue your treatment.
Symptoms to look out for

You should contact your GP urgently or go to your nearest Emergency Department if you experience any of the following:

- nosebleeds that last for more than 10 minutes
- blood in your vomit or sputum (phlegm)
- passing blood when you go to the toilet – either in your urine or faeces (stools)
- passing black coloured faeces
- severe or spontaneous bruising (bruises that appear with no injury)
- unusual headaches.

If you experience less severe nosebleeds which stop easily after one or two minutes, please discuss this with your healthcare professional at the DVT service.

Where can I find out more information?

The healthcare professional looking after you can answer any questions you might have.

You can also visit the following websites for further information:

www.ouh.nhs.uk/patientinformation

NHS Choices
www.nhs.uk