

Deep Vein Thrombosis (DVT)

This leaflet offers information about deep vein thrombosis. If you have any further questions or concerns, please speak to the staff member in charge of your care.

What is deep vein thrombosis and why have I got it?

A deep vein thrombosis (DVT) is a blood clot in a vein (a blood vessel) usually in the leg but sometimes in other places, e.g. the arm.

Some DVTs happen for no obvious reason. Sometimes it may happen as a result of the following:

- surgery
- trauma such as fractures or muscle injuries
- long periods of inactivity, for example being in bed with influenza ('flu')
- long journeys including flights of over four hours duration or long unbroken car journeys
- pregnancy and childbirth
- certain types of oral contraceptive pill or hormone replacement therapy
- obesity
- cancer.

Some people have an inherited or acquired increased likelihood of their blood becoming thick and clotting. This is called thrombophilia and can affect other members of the family. You will be given advice about this if needed.

What are the signs and symptoms?

The signs and symptoms of DVT are:

- pain
- swelling
- tenderness
- discolouration of the affected limb.

Do I need any tests to confirm the diagnosis?

If you show symptoms of a DVT you may have one or more of the following tests:

- **d-dimer blood test**
- **Ultrasound** – a painless test where an ultrasound probe is moved over the top of your affected limb. The radiologist is then able to use the results to see if there is a clot.
- **Venogram** – a test where a dye is put into the veins of the affected limb and the flow of dye is recorded using an X-ray to see if there is a blood clot.

What treatments are available?

Once the DVT is confirmed you will be started on **anticoagulant** drugs which make your blood take longer to clot (sometimes called thinning the blood or making it less sticky) and this lessens the risk of your clot getting any bigger. Your body can then dissolve the clot itself over the next few weeks.

The most commonly used direct oral anticoagulants are rivaroxaban, apixaban, edoxaban or dabigatran. If you cannot have these for any reason you will be started on heparin or warfarin.

You do not normally need to have this treatment in hospital as most patients are treated at home.

- **Rivaroxaban, Apixaban, Edoxaban, Dabigatran** – you may be prescribed one of these drugs which are oral tablets. Dosing varies dependent on the drug - see instruction on your dispensed medications.
- **Heparin** is usually given by injection under the skin once a day or by a drip into a vein. If used with warfarin tablets, heparin is stopped when the warfarin starts to work fully.
- **Warfarin** is taken once a day in tablet form. It takes several days to have a full effect so is used with heparin until the right blood level is reached and then the heparin is stopped.

In a very small number of patients there is a risk of the clot travelling to the lungs and causing a potentially serious condition called a pulmonary embolus, which treatment with anticoagulants alone may not prevent. If this happens you may be treated with an IVC filter, put into the main blood vessel carrying blood to the heart (the vena cava). This filter can trap clots stopping them reaching the lungs.

What happens next?

Your anticoagulant treatment may need to be reviewed at the **anticoagulant clinic**. If you are taking warfarin the clotting time of your blood must be regularly checked and measured against a standard. This gives us your International Normalised Ratio (INR), which we will normally try to keep between two and three, meaning your blood will take two to three times longer to clot than normal. Your dose of warfarin may be changed depending on your INR result.

As warfarin and direct oral anticoagulants can affect other medications you must tell anyone prescribing other drugs for you that you are on warfarin or direct oral anticoagulant.

Please also tell the anticoagulant clinic straight away if there are any changes to your other drugs.

Most people take anticoagulation for a minimum of three months. You may need to have treatment for longer depending on the cause of the blood clot and how bad it is. If you have had a clot before you may be advised to stay on anticoagulation for life.

After stopping anticoagulation you may be asked to have a blood test to check if you have an inherited tendency to develop blood clots.

You may still have pain and swelling for several weeks following your DVT. Taking regular painkillers, wearing compression stockings and raising the affected limb will all help. You should raise the heel higher than the level of the hip for leg elevation to work.

If your pain and/or swelling get worse, contact your GP straight away.

What do I need to do after I go home?

It is important to **exercise gently** (e.g. walking, cycling or swimming) once your symptoms have started to get better, to help the blood flow and keep the muscles working well. Contact sports should be avoided while you are taking an anticoagulant and you should also avoid standing for long periods of time.

Your affected leg should be elevated when you are seated. Only start driving again when you can do an emergency stop safely without feeling too much pain.

Being overweight can increase the risk of a clot developing so try to lose weight if needed. There is no medical reason to refrain from sex after a blood clot.

You may return to work when the worst of the pain and swelling have improved.

What should I do if I have a problem?

If you experience any of the following you should contact your GP or go to Accident & Emergency straight away:

- worsening pain
- increasing limb swelling
- shortness of breath
- chest pain
- coughing up blood

Will I get another blood clot?

The risk of this depends on what caused your clot.

You should take special precautions during:

- airline flights, particularly if longer than four hours
- In general, flying (especially long-haul) is not advised in the first four weeks after a DVT. Once your symptoms have settled and you are tolerating anticoagulation well, it should be fine for you to travel but you may wish to discuss with your GP or at your anticoagulation clinic.
- long periods of inactivity
- pregnancy.

You will also need extra precautions and advice after surgery, trauma or lower limb fracture. You should check with your doctor first if you are thinking of taking hormone replacement therapy or the combined oral contraceptive pill.

If you are admitted to hospital, you must tell your doctor that you have had a blood clot.

Useful sources of information

NHS Deep Vein Thrombosis

<https://www.nhs.uk/conditions/deep-vein-thrombosis-dvt/>

<https://thrombosisuk.org/what-is-dvt.php>

Contact us

If you have any questions or concerns about deep vein thrombosis, please contact your GP or the anticoagulant clinic on 020 8725 2826 (Monday to Friday, 9am to 5pm). Out of hours, please contact our switchboard on 020 8672 1255 and ask for the haematology specialist registrar on call.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.stgeorges.nhs.uk

Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough wings (near the lift foyer).

Tel: 020 8725 2453 **Email:** pals@stgeorges.nhs.uk

NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.

Web: www.nhs.uk

NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

Tel: 111

AccessAble

You can download accessibility guides for all of our services by searching 'St George's Hospital' on the AccessAble website (www.accessable.co.uk). The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.



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