

If you require a special edition of this leaflet

This leaflet is available in large print. Arrangements can also be made on request for it to be explained in your preferred language. Please contact the Patient Advice and Liaison Service (PALS) email: pals.office@rjah.nhs.uk

Feedback

Tell us what you think of our patient information leaflet. Please send your comments to the Patient Advice and Liaison Service (PALS) email: pals.office@rjah.nhs.uk

There are many benefits in stopping smoking before your surgery.

These include:

- The risk of anaesthetic complications, such as breathing problems and chest infections are reduced.
- Wounds may heal more quickly
- Smoker's bones, muscles and tendons can be slower to grow and repair.
- Risk of blood clots (DVT) is reduced
- Your hospital stay may be shorter

The sooner you give up smoking before your operation the greater the benefits.

Research shows that you are four times more likely to succeed in quitting completely with help and support.

Date of publication: January 2015

Date of review: January 2017

Author: VTE committee - reviewed by P White / E Jones

© RJAHS Trust 2015

Information for patients

Reducing the risk of blood clots in hospital



General Information

The Robert Jones and Agnes Hunt
Orthopaedic Hospital NHS Foundation Trust,
Oswestry, Shropshire SY10 7AG
Tel: 01691 404000
www.rjah.nhs.uk

Introduction

This leaflet is about the care and treatment of people who are at risk of developing Venous Thromboembolism while in hospital.

What is Venous Thromboembolism?

Sometimes a blood clot called a **deep vein thrombosis (DVT)** can develop in the legs or pelvic veins. If the blood clot comes loose it can travel through your bloodstream to your lungs. This is called **pulmonary embolism (PE)** and it can cause chest symptoms such as chest pain and shortness of breath. DVT and pulmonary embolism together are known as **venous thromboembolism (VTE)**.

Who is at risk?

Each year, one in every 1,000 people in the UK is affected by DVT. Anyone can develop a DVT, although it becomes more common with age. Risk factors include:

- previous venous thromboembolism
- a family history of thrombosis
- medical conditions such as cancer and heart failure
- inactivity (for example, after an operation)
- being overweight or obese
- extreme dehydration
- poor circulation.



More information

The organisations below can provide more information and support for people in hospital who may be at risk of DVT. The Robert Jones and Agnes Hunt Orthopaedic Hospital is not responsible for the quality and accuracy of any information or advice provided by these organisations.

- Lifeblood: The Thrombosis Charity, **0207 633 9937**, www.thrombosis-charity.org.uk
- NHS Choices (www.nhs.uk) may be a good place to find out more.

References

- National Institute for Health and Clinical Excellence (NICE): Reducing the risk of deep vein thrombosis (DVT) for patients in hospital. January 2010
- Deep Vein Thrombosis: Patient UK leaflet
- NHS Clinical Knowledge Summaries: Patient information leaflet: Deep Vein Thrombosis
- Informed choice in medicine taking, Drugs of porcine origin and clinical alternatives, endorsed by the Muslim Council of Britain, Rabbi Abraham Adler, a rabbinical authority on pharmaceuticals, and Dr Joseph Spitzer a GP and authority on Judaism and medicine.



After discharge from hospital

- Continue to ensure that you have enough fluids so that you do not become dehydrated.
- Move around as much as you have been advised by your healthcare team.
- Some patients will need to continue to have drug treatment to help prevent clots after discharge from hospital. The hospital will supply all the injections or tablets/capsules you need to complete your preventative treatment. It is important that you complete your course of treatment. If you have any questions about this after discharge contact the ward or the hospital medicines helpline (01691-404339). If you think you may have developed a reaction to the injection contact your GP.

How can I tell if I might have a DVT or Pulmonary Embolism?

There are certain signs to look out for after your hospital treatment that may mean you have developed a DVT or Pulmonary Embolism. You should seek help immediately by contacting your GP or attending the Accident and Emergency Department at your local hospital if you experience any of the following in the days or weeks after your treatment.

- You have increased pain or persistent swelling in your leg.
- The skin on your leg feels hot or is discoloured (red, purple or blue), other than bruising around the area where you have had an operation.
- The veins near the surface of your legs appear larger than normal or you notice them more.
- You become short of breath.
- You feel pain in your chest or upper back.
- You cough up blood or frothy blood streaked sputum.

Avoiding DVT

There are several things you can do to help prevent DVT occurring, such as losing weight if you are overweight and walking regularly to improve the circulation in your legs.

Am I at risk of developing a DVT in hospital?

DVT is more likely to happen when you are unwell and inactive or less active than usual.

DVT can happen at any time during a stay in hospital or in the weeks after leaving hospital.

Your risk of developing a DVT may be related to the clinical reason that you have been admitted to hospital and to the type of treatment you will have, for example whether you are having an operation.

Your healthcare team will assess your risk of DVT when you are admitted to hospital. They will take into account a range of risk factors including your reason for admission, your mobility in hospital, your age, your medical history and medicines that you may already be taking. If you are at risk of DVT your healthcare team will also assess whether bleeding might be a problem during your hospital treatment. They will discuss with you whether you should have a drug to help prevent DVT or whether the risk of having problems with bleeding is higher than your risk of DVT.

What are the consequences of developing a DVT?

There are three main consequences of deep vein thrombosis (DVT):

- The DVT itself can produce swelling and pain in the limb because of blockage of the return of blood from the limb
- Risk of pulmonary embolism
- Risk of post-thrombotic syndrome

Pulmonary embolism

This is the most serious complication of DVT. A [pulmonary embolism \(PE\)](#) happens when a piece of blood clot (DVT) breaks off and travels through your bloodstream to your lungs, where it blocks one of the blood vessels. This is serious and in severe cases, can cause sudden death.

If the pulmonary embolism is small, it might not cause any symptoms. If it is medium sized, it can cause breathing difficulties and chest pain. A large pulmonary embolus can cause the lungs to collapse and result in heart failure and possible death.

Post-thrombotic syndrome

If you have had a DVT, you may develop long-term symptoms in your calf, known as post-thrombotic syndrome.

If you have a DVT because the blood clot in the vein of your calf stops blood flow, the blood can divert, to other veins, causing an increase in pressure that can affect the tissues of your calf. Symptoms include:

- calf pain
- swelling
- a rash and
- (in severe cases) ulcers on the calf.

When a DVT develops in your thigh vein, there is an increased risk of post-thrombotic syndrome occurring. It is also more likely to occur if you are overweight, or you have had more than one DVT in the same leg.

How can I reduce the risk of developing a DVT?

[Before admission](#) - certain drugs e.g the combined contraceptive pill and hormone replacement therapy (HRT) can increase the risk of developing a DVT. If any changes need to be made to your drug treatment before admission this will be discussed with you at your pre-operative assessment. Please make sure you make the healthcare team aware of all medicines you are currently taking.

If you have had a DVT or pulmonary embolism before and are currently taking medication for this e.g. warfarin, please discuss this with your healthcare team.

In hospital

- Make sure that you have enough fluids so that you do not become dehydrated.
- Your healthcare team will encourage you to move around as soon as you are able.
- Depending on your risk assessment you may be offered an injection or sometimes a tablet or capsule to help to prevent clots from forming. If you need to continue with this after you leave hospital make sure you are able to administer the treatment or have someone available to help you. Your healthcare team will tell you how long you need to continue with treatment.
- If an injection is prescribed for you this may be a heparin, which is a drug used to reduce the risk of clots forming. Heparin is derived from a porcine (pig) source and is generally accepted by Muslim and Jewish patients, as the heparin from a porcine source is accepted under religious law. Vegans and vegetarians may also object to the origins of this medication. If you have any concerns please ask your healthcare team for more information.
- You may be offered foot pumps whilst in hospital. These are worn on your feet. They inflate automatically at regular intervals. When these devices are inflated they apply pressure, which helps keep the blood in your legs circulating. It is important to use your foot pumps for as much of the time as possible, both when you are in bed and when you are sitting up in a chair. Your healthcare team will show you how to use the device correctly and check regularly to make sure you are getting the most benefit from it.
- Regular deep breathing exercises and leg muscle tightening and relaxing as instructed by a physiotherapist can also help prevent a DVT.