NHS Bath and North East Somerset Royal National Hospital Royal United Hospital Bath for Rheumatic Diseases NHS Foundation Trust

NHS Trust

# **RUH** Information for Patients

#### Preventing blood clots during and after a stay in hospital



### Healthcare you can Trust



# What is a Deep Vein Thrombosis (DVT)?

A DVT occurs when a blood clot forms in a deep vein, usually in the leg or pelvis, leading to your circulation being partially blocked. A DVT in itself is not a serious condition, however it can lead to a more serious complication called a pulmonary embolus (PE).

Symptoms of a DVT are:

- swelling
- pain
- calf tenderness and occasionally heat and redness compared to the other leg.

There are other causes of a painful and swollen calf, particularly after injury or surgery, so you should ask your GP to assess you. If a DVT is suspected, you will need a scan of your leg. Even if a DVT occurs, there may not be any outward symptoms in your legs at all and the clot may be diagnosed only if a pulmonary embolus occurs.

# What is a Pulmonary Embolus (PE)?

A pulmonary embolus occurs if a piece of the blood clot in your leg breaks off and moves in the blood stream to your lungs. This can cause breathing difficulties and very rarely can cause death.

Symptoms of a PE are:

- difficulty breathing
- chest pain
- coughing up blood.

If you experience any of these symptoms, you should seek immediate medical help.

### Why can a blood clot form?

A blood clot is more likely to happen when you are unwell or less active than usual. Your blood may become temporarily 'sticky' and flow more slowly. If you are inactive it is more likely that a blood clot will form inside a vein. Your blood can also become more sticky if you have not been drinking enough fluids; this can increase the risk of a clot forming.

#### Who is most at risk?

You may be at risk of DVT if any of the following apply to you:

- if you (or a close relative) have had a DVT or PE before
- if you are having major surgery, particularly orthopaedic operations such as a joint replacement
- if you have had a major injury or have your leg in a plaster cast
- if you are aged over 60 years
- if you are having treatment for cancer
- if you have a medical condition where the blood has an increased tendency to clot (thrombophilia)
- if you are, or have recently been, ill (for example with a heart or lung problem, an infection or an inflammatory condition such as inflammatory bowel disease)
- if you are overweight
- if you are pregnant and have given birth within the past six weeks
- if you are confined to bed for more than three days, or are unable to walk without help
- if you are taking an oestrogen-containing contraceptive pill (the combined pill) or hormone replacement therapy.

The risk of a blood clot forming after an operation varies depending on the type of operation. Minor day surgery procedures in healthy people carry very little risk.

#### Is travelling a risk?

Because being immobile increases the risk of developing blood clots, if you travel for more than four hours at one time in a month before or after your surgery, the risk of a blood clot forming may increase.

If you have had a hip or knee replacement, the risk is present for up to three months, particularly for long haul flights over four hours.

### How is DVT/PE prevented during your inpatient stay?

Either in the pre-admission clinic, or when you are admitted to hospital, you will be assessed by your healthcare team for:

- your risk of developing a DVT/ PE during your hospital admission
- whether bleeding might be a problem during your hospital treatment.

If your risk of having problems with bleeding is higher than your risk of developing a DVT/PE you should not be offered a drug to help prevent DVT. This is because these drugs make the blood less sticky and may increase your risk of bleeding problems.

Depending on your risk factors you may be offered:

- compression stockings or an intermittent pneumatic compression device to help keep the blood in your legs circulating
- a drug known as an anticoagulant that makes the blood less sticky and helps prevent blood clots forming.

**Compression stockings** help your blood to circulate around your legs more quickly. Your legs will be measured so you are given the correct size. You should not be offered compression stockings if you have recently had a stroke, you have peripheral arterial disease (narrowing of the arteries leading to your legs), peripheral neuropathy (damage to the sensory nerves), eczema or fragile skin on your legs, fluid on the lungs caused by heart failure, an allergy to the stocking material or if your legs are very swollen or a good stocking fit cannot be achieved.

**Intermittent pneumatic compression devices** are worn around your legs or on your feet. They are normally only used in the operating theatre environment. They inflate automatically at regular intervals. When they are inflated they apply pressure which helps keep the blood in your legs circulating.

#### Anticoagulant drugs (to make the blood less sticky)

- Heparin: Heparin is given as a small injection once a day into your stomach or thighs. The main side effect of heparin is bruising and you may notice some bruising around the injection site. Heparin is made from animal products. Synthetic alternatives may be available if you are concerned about this.
- Rivaroxaban: If you are having a hip or knee replacement you will be offered a blood thinning tablet called Rivaroxaban. You will be given information on Rivaroxaban by your nurse or doctor before or after your surgery.

# What can I do to help myself?

There are some simple things that can help to reduce your risk:

- make sure that you get up and walk about as soon as possible
- exercise your legs whilst in bed
- make sure you drink plenty of water.

# What can I do once I go home?

Once you get home, it is important to:

- continue to be as mobile as possible
- exercise your legs if sitting for any length of time
- continue to drink plenty of water.

Depending on your circumstances, you may need to continue either Rivaroxaban tablets or heparin injections. You will be given further information if this is the case.

## What will happen if I get a blood clot?

If you get any of the symptoms of a DVT or PE you should see a doctor urgently either at your GP surgery or the emergency department. If it is suspected you have a DVT or PE you will be given treatment with a drug to make the blood less sticky.

# Can DVT/PE be treated?

Yes – and the treatment is very effective if the symptoms are recognised early. The aim of the treatment is to prevent the clot spreading and to let it slowly dissolve.

# Notes

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#### Further information

If you would like more information, please ask a member of the team caring for you. After you have gone home from hospital you can contact your GP.

The organisations below can provide more information for people in hospital who may be at risk of DVT.

Lifeblood: The Thrombosis Charity www.thrombosis-charity.org.uk 0207 633 9937

Anticoagulation Europe www.anticoagulationeurope.org 0208 289 6875

British Heart Foundation, Heart HelpLine: 0300 330 3311 www.bhf.org.uk

NICE – National Institute for Health and Clinical Excellence www.nice.org.uk

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