

# **Preventing blood clots**

This factsheet has been written to provide you with important information about blood clots and how we will work to reduce your risk during your hospital stay. If you have any questions or would like more information, please speak to a member of your healthcare team. You can also contact the venous thromboembolism (VTE) prevention team using the contact details at the end of this factsheet.

### About blood clots

Blood normally flows quickly and uninterrupted through our veins. Sometimes however, clots can form that either reduce the blood flow or stop it completely.

**A deep vein thrombosis (DVT)** is a blood clot in a deep vein, usually in the leg or pelvis. The common cause is immobility, for example, not moving around as much you usually do while you're unwell or recovering from an operation.

Long-term discomfort and swelling of the ankle and calf can occur in some people following a DVT. This is called post-thrombotic syndrome.

**A pulmonary embolism (PE)** is when all or part of a blood clot becomes dislodged and travels with the natural flow of blood back to the lungs. The clot then gets stuck and blocks one of the blood vessels in the lungs. This may be fatal.

DVT and pulmonary embolism together are known as venous thromboembolism (VTE).

Many people think that going on a long flight is the biggest risk factor for suffering a VTE. Unfortunately, the risk of getting a blood clot in hospital is far greater than that from a long-haul flight.

Just being admitted to hospital with an illness carries a 15% chance of developing DVT. Having surgery carries a 30% chance of developing a DVT unless you have preventative treatment.

It is estimated that about 1 in 1,000 people have a DVT each year in the UK.

### Symptoms of deep vein thrombosis (DVT) include:

- unexplained swelling of the calf or thigh. This is usually accompanied by:
  - pain
  - heat
  - redness
  - difficulty in weight bearing.

However, many DVTs produce none, or only some of these symptoms.

# Symptoms of a pulmonary embolism (PE) include:

- unexplained difficulty in breathing
- shortness of breath
- coughing up bloodstained sputum
- chest pain that is often worse on breathing in.

These can sometimes be accompanied by symptoms of DVT.

# **Risks factors for VTE**

Some people are more at risk of VTE than others. The risk increases when you come into hospital, especially if you:

- have had major surgery
- are aged over 60
- have experienced long periods of immobility or a reduction in your usual level of mobility
- are taking certain medications, such as HRT, oral contraception, tamoxifen, raloxifene or chemotherapy
- are pregnant or have had a baby within the last six weeks
- have cancer or are undergoing cancer treatment
- are overweight
- have had a previous venous thromboembolism (VTE)
- are dehydrated
- have certain blood diseases
- have a family history of thrombosis
- have an inherited or acquired clotting problem
- are suffering from an acute medical illness
- have more than one medical condition such as heart disease, diabetes or a respiratory illness
- have inflammatory disease such as Crohn's or rheumatoid arthritis
- have undergone continuous long-haul travel of more than four hours within four weeks before or after your hospital stay.

#### **Prevention**

Most DVTs and PEs can be prevented safely and effectively. Therefore, preventing blood clots is a priority for hospital staff. Our doctors, nurses, pharmacists and other teams all play an important role in keeping you safe.

On admission to hospital, each patient over 16 has their risk for VTE assessed and, if necessary, preventative measures advised. We will also assess if any of the preventative measures may not be suitable for you.

Feel free to ask your doctor or nurse what is being done to reduce your risk of VTE, if this has not already been discussed with you, or if you would like to know more about possible side effects of the treatment.

### Anti-embolism stockings (AES)

You may be measured and fitted with anti-embolic stockings (AES). The stockings work by gently compressing your legs. This increases the blood flow and prevents your leg veins from expanding, which stops blood pooling in your legs and forming a clot. They should be worn day and night until you are back to your normal levels of mobility. AES are very effective in reducing DVT in surgical patients. It is important that you are shown how to put them on and care for them before you go home. If you are not sure, please ask a member of your healthcare team.

#### **Compression devices**

These are inflatable sleeves that are fitted around the leg or foot and kept in place while you are immobile in your hospital bed. They inflate at regular intervals and the pressure increases the flow of blood back to the heart.

Compression devices are often used for patients who have had a stroke. This reduces the risk of developing blood clots and may increase chances of survival, but will not help them recover from stroke.

#### Keep moving

It is important to move around as soon as possible, especially after surgery. This is sometimes the only measure that needs to be taken.

#### Leg exercises

Point your toes down and bend the foot up at regular intervals as this helps to pump blood back to the heart. Rotate your ankles. Do this at least ten times an hour when you are inactive for long periods of time.

#### **Drink plenty of fluid**

Dehydration can also increase your risk of DVT, so make sure you drink enough fluid.

#### **Medication**

You may also be prescribed medication to prevent and treat blood clots. These are called anticoagulants or antiplatelets.

While you are in hospital it's likely that you will be given medication in the form of an injection, but sometimes it will be in tablet form instead. Your doctor will advise which is best for you.

In some situations, the medication may need to be continued once you have left hospital. If you need to continue with the injections at home, please ensure a nurse has shown you how to give them correctly and how to safely dispose of the empty syringes.

#### If you are identified as being at higher risk of bleeding

Anticoagulant or antiplatelet medicines reduce your risk of developing a clot, but they may also increase your risk of bleeding. Because of this, we assess whether bleeding might be a problem during your hospital treatment. If your risk of having problems with bleeding is higher than your risk of VTE, you will not be given an anticoagulant to help prevent VTE, but you may be given other treatments instead.

#### **Additional information**

#### Medicines of animal origin

Some medicines are of animal origin. Please talk to your nurse, doctor or pharmacist if you are concerned about using animal products, so we can discuss this with you.

#### **Unlicensed medicines**

Most medicines used in the UK have a licence that says exactly how the medicine should be used. However, this licence may not include use in people under 18 years of age, or in a particular illness or condition.

The license for aspirin, for example, does not include the use to reduce the risk of blood clots. However, aspirin has been used safely and effectively for many years to reduce the risk

of blood clots after certain types of orthopaedic operations, and your doctor may therefore prescribe it for you.

Some other medicines used to reduce the risk of blood clots are not currently licensed for use in people under 18, but they do have a licence for use in adults. Some of these medicines have been used for many years in under 18s and are considered safe and acceptable to use in this age group.

Your doctor will only suggest using an unlicensed medicine if they think that it is the best thing to help reduce your risk of developing blood clots. Please talk to your nurse, doctor or pharmacist if you are concerned about using an unlicensed medicine or would like more information.

### Side effects

With any treatment, there is the possibility of developing side effects. Please talk to a nurse, doctor or pharmacist if you think any treatment you are receiving is causing you any problems.

### **Going home**

When it is time for you to leave hospital, it is important to continue any treatments until the course finishes. If you are discharged with anti-embolism stockings, please continue to wear these for up to six weeks, or until you are back to your usual level of mobility, whichever is sooner. Please ask for the patient information fact sheet on anti-embolism stockings, if you have not already received this.

VTE can happen at any time during a stay in hospital or in the weeks after leaving hospital. If you experience any VTE symptoms or bleeding once you are at home you should seek urgent medical advice from:

- your GP
- 111
- your nearest emergency department.

Ask a member of your healthcare team if you have questions or require further information about your risk factors or anything covered in this leaflet.

### **Contact us**

**VTE prevention team** Telephone **023 8120 6269** Monday to Thursday 8am to 4.30pm, Friday 8am to 3pm.

### **Southampton Medicines Advice Service**

Telephone: **023 8120 6907** Monday to Friday 9am to 6.30pm Email: medicinesadvice@uhs.nhs.uk

University Hospital Southampton NHS Foundation Trust Southampton General Hospital Tremona Road Southampton SO16 6YD

Useful links www.nhs.uk/conditions/blood-clots/ www.nice.org.uk/ www.thrombosisuk.org www.patient.co.uk/health/Deep-Vein-Thrombosis.htm www.patient.co.uk/health/Pulmonary-Embolism.htm www.medicinesforchildren.org.uk/unlicensed-medicines

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Version 4 Published March 2022. Due for review March 2025. 1564