Oxford Haemophilia & Thrombosis Centre

Preventing blood clots while in hospital

Information for patients
What causes blood to clot?

Blood clotting is vital to make sure that when we cut ourselves a clot forms to stop the bleeding. However, there are times when the clotting process goes wrong and blood clots inside our veins, causing a Deep Vein Thrombosis (DVT) or a Pulmonary Embolism (PE).

This is more likely to happen when you are admitted to hospital. The blood flow around the body can be slower or becomes sticky – for example, after an operation, or because of infection, or from being in a bed for a few days and moving about less than usual.

What is VTE?

Venous thromboembolism (VTE) is the collective name for DVT and PE. VTE can be a very serious and potentially life-threatening condition.

Deep Vein Thrombosis is the name given to a blood clot which forms inside a vein that is deep beneath the skin of your leg, or sometimes in your pelvis. The clot blocks the flow of blood through the affected vein and can cause several signs and symptoms.

Sometimes, a part of the clot breaks off and passes through your circulation until it reaches your lung. This is called a pulmonary embolism.
Signs and symptoms of a DVT and PE include:

**DVT**
- leg pain or tenderness
- leg swelling
- leg warm to touch
- redness of the leg

**PE**
- shortness of breath or difficulty breathing
- chest pain
- coughing up blood
- sudden collapse

However, a DVT or PE may occur without any symptoms.

**Who is at risk of a VTE?**

There are factors which place you at greater risk of a VTE. These include:

- staying still or in one position for long periods of time – especially if you are having an operation or are unwell enough to be confined to bed
- a family or personal history of VTE
- a medical condition, such as heart failure or diabetes, or significant infection
- cancer
- certain medications, such as the contraceptive pill or hormone replacement therapy
- increasing age, especially age greater than 60 years.
What you can do to reduce the risk of developing a VTE

Before you come into hospital:
• Talk to your GP about medication, especially if you are taking the contraceptive pill or hormone replacement therapy. Your GP may advise you to stop taking these in the weeks before your operation.
• Keep to a healthy diet.
• Stop smoking.

During your stay in hospital:
• Ask your doctor or nurse “What is being done to reduce my risk of a VTE?”
• Keep moving around, especially after surgery.
• Exercise your legs while you are in bed (see page 5 for leg exercises).
• Drink plenty of water.

If you are considered to be at risk of VTE, your doctor will consider prescribing you a drug called heparin, which is a small injection. Possible side effects of this injection can be bruising at the injection site and prolonged bleeding if you cut yourself (but this is rare).

You may be advised to wear elasticated stockings (anti-embolism stockings), which are designed to minimise the risk of blood clots. You will be measured for these stockings and shown how to wear them.

You may be asked to wear a special inflatable sleeve around the lower part of your leg or foot while you are in bed. This is called intermittent pneumatic compression (IPC). The sleeve inflates automatically and provides pressure at regular intervals, which can help prevent blood clots.

If you develop any new signs or symptoms of a DVT or PE, please report these to your nurse or doctor.
At home:
Once you get home, it is important to:
• Keep moving around.
• Drink plenty of water.
• Continue with leg exercises (see below for leg exercises).

If you need to continue taking heparin when you go home we will give you more information before you leave. We will also show you or a family member/friend how to give the injections before you leave hospital and will explain how to safely dispose of the needles. Be aware that your risk of developing blood clots can continue to be increased for up to 3 months after you have gone home.

Leg exercises

The following exercises are intended to help your circulation and breathing. These can be carried out both sitting up and lying down, but are more effective if you are sitting up.

Ankles: Paddle your feet up and down and circle them around and around.

Knees: Brace your knees so that you can feel the muscle tighten on the front of your thigh. Hold for a count of 3 and gently relax.

Bottom: Clench your buttock muscles together and hold for a count of 3 before relaxing.

Breathing: Place your hands on each side of your rib cage. Take a deep breath and feel your ribs being pushed out to the side as you expand your lungs.

You will need to continue with these exercises until you are fully able to get up and move around.
Hospital Acquired Thromboembolism (HAT)

Hospital Acquired Thromboembolism is a DVT or PE which occurs either during a hospital admission or within 90 days of a hospital admission.

If you develop a blood clot within 90 days of being in hospital we will investigate whether you received good clot prevention measures. This may take several months. We will contact you if the investigation shows any failing in your care.

VTE prevention App

Have you been admitted to hospital or are you, a friend or a relative being admitted to hospital?

Help reduce the risk of getting a blood clot in hospital with this free App. It can be downloaded from the Play store or App store.

It contains useful information for before, during and after your hospital stay.

Visit: www.vte-prevention.co.uk
How to contact us

If you have any questions or concerns about VTE, please contact the VTE Prevention Specialist Nursing team:

Tel: **01865 225 384** or **01865 857 519**
(9.00am to 5.00pm, Monday to Friday)

Further information

The National Institute of Clinical Excellence (NICE) have produced guidelines on reducing the risk of thromboembolism for people in hospital. Information on this topic for patients and carers can be found at:

www.nice.org.uk/guidance/cg92/informationforpublic
If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALS@ouh.nhs.uk**