



Venous Thromboembolism (VTE) prevention

This leaflet explains what Venous Thromboembolism is, who is at a higher risk of getting it and what can be done to prevent it.

What is Venous Thromboembolism?

Venous Thromboembolism (VTE) means when clots form in blood vessels called veins that carry blood back to the heart. If the clots form in deep veins, such as in the legs or groin, these are referred to as deep vein thrombosis (DVT).

Blood circulation is essential for life and the blood normally flows without interruption. If the blood vessels are damaged, the blood clots to stop the bleeding. Sometimes, blood clots form where they should not and they may slow or stop the blood flow. Clots are more likely to form if the blood flow is slow, if there is an injury to the veins, or if something affects the clotting ability of the blood, such as being unwell with infection, inflammatory conditions or cancer.

If a part of the clot breaks off, it can travel through the blood and get stuck in the main blood vessels (arteries) of the lung, causing a pulmonary embolism (PE), which can be very serious. VTE is a major cause of illness or death in patients who spend time in hospital, so taking measures to reduce the risk of developing a clot are an important part of many patients' treatment.

Who is at risk of developing VTE?

You are more at risk of developing a thrombosis in hospital if one or more of the factors below apply to you:

- You are undergoing major surgery.
- You are aged over 60.
- You have long periods of not moving or reduced mobility.
- You are on certain medications, such as hormone replacement therapy (HRT), oral contraception (the Combined Pill), tamoxifen, raloxifene and chemotherapy.
- You are pregnant or have given birth within the last 6 weeks.
- You have cancer or are receiving cancer treatment.
- You are overweight or obese.
- You have had a previous VTE or there is a family history of VTE.
- You are dehydrated.
- You have an inherited or acquired blood clotting problem.
- You have a serious medical illness or a disease of the blood.
- You have more than one medical issue, such as heart disease, diabetes or respiratory illness.
- You have travelled long-haul (for journeys where you sit for longer than 4 hours) within 4 weeks before or after hospital admission.

How can VTE be prevented?

In your admission and pre-operative assessments, your individual risk of developing a VTE is assessed and you will be given appropriate preventative measures according to the level of risk of forming a clot and risk of bleeding.

Please ask your doctor or nurse about the preventative treatments that you are or will be receiving.

You may receive one or more different treatments and may be recommended ways in which you can help prevent clots, these include:

- **Medication:** Anticoagulants (drugs that prevent clotting) may be used, either subcutaneous (under the skin) injections or for some patients, tablets are suitable. Some patients may need to continue with the medication after they leave hospital. If this is necessary your nurse will explain the procedure.
- **Compression devices:** These are inflatable sleeves fitted around your foot or calf that inflate and deflate at regular intervals to encourage circulation; this feels a bit like a leg massage. Compression devices are commonly used on the intensive care unit (ICU), the acute stroke unit and for patients who have just had operations under anaesthetic. The devices aren't suitable for everyone, for example, if you have problems with your skin or swelling of your legs or narrowed arteries.

You can take the devices off when you go to bathroom or move to other areas, but you will need to put it back on again quickly afterwards to have the best effect.

The part of the device that goes around the leg needs to be removed daily for washing or showering and to allow staff to assess your skin. If you get pain or tingling or numbness while wearing the devices, let the nurse looking after you know.

- **Other ways in which you can help prevent VTE include:**
 - Eating a healthy balanced diet. <https://www.nhs.uk/live-well/eat-well/>
 - If you are overweight, try to lose some weight before you come into hospital (if it is a planned admission).
 - Drink plenty of fluid. Dehydration is a risk factor for VTE.
 - Mobilising and exercises. Movement is important and aids recovery after surgery. Mobilising as soon as you feel well enough or doing foot exercises at least 10 times an hour while you are inactive helps pump blood around the body.

How do I know whether I have VTE?

Not all people with VTE have symptoms. The most common symptoms include:

- Pain, tenderness and swelling of the calf.
- Mild fever, with heat in the area of the thrombosis (blood clot).
- Redness.
- Shortness of breath.
- Chest pain when breathing.

Is there a treatment for VTE?

Treatment for a clot in the vein is with anticoagulants. These are medicines that significantly thin the blood. They are usually given for 3 to 6 months if the blood clot happened when you were unwell or in hospital. Depending on where the clot is, for some patients treatment is not needed or appropriate. In some cases, clot removal or more intensive clot dissolving drugs may be needed.

More information about VTE

Speak to your nurse or doctor if you have any concerns or questions.

If you are worried that you have blood clot and are suffering any of the symptoms listed in this leaflet, you should seek medical advice from your GP or the nearest hospital emergency department (A&E).

NICE provide detailed advice to hospitals about preventing blood clots in hospital:

<https://www.nice.org.uk/guidance/ng89>

The charity Thrombosis UK provide helpful information on their website and app “Let’s Talk Clots” about reducing the risk of thrombosis in hospital. <https://thrombosisuk.org/patient-information/lets-talk-clots-app/>

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

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