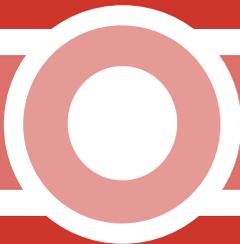




A Patient's guide to

preventing deep vein  
thrombosis and pulmonary embolism  
(blood clots)



This leaflet has been produced to help answer some of the questions you may have about blood clots.

## **What is a Venous Thromboembolism (VTE)?**

VTE is the name given to a deep vein thrombosis (DVT) or a pulmonary embolism (PE).

A DVT is a blood clot (thrombosis) that forms in a deep vein, most commonly in the leg or pelvis and can cause swelling and pain. If a clot forms, it can travel through the veins to the lungs. This is called a pulmonary embolism (PE).

## **Is VTE common?**

Blood clots occur in about 1 in 500 people in the general population<sup>1</sup>. However you are much more likely to get VTE if you are going into hospital because of illness or for surgery.

If you are having a leg operation the risk of having a VTE without blood thinners can be about 50%<sup>2</sup>.

## What are the signs and symptoms of VTE?

80% of DVTs produce no symptoms apart from pain. However, they may also cause:

- Throbbing and tightness in the leg
- Leg swelling
- Redness in the calf or thigh area

PEs can cause:

- Breathlessness
- Cough with blood stained sputum
- Chest pain
- Sudden collapse

If you experience any of these signs or symptoms, you should inform a member of the healthcare team, attend your GP or the emergency department **immediately**.

## Who is at risk of developing VTE?

In addition to admission to hospital there are other factors which increase your risk of VTE. These include:

- A DVT or PE in the past
- A recent diagnosis of cancer or having treatment for cancer
- Taking hormone treatment, such as the oral contraceptive pill, hormone replacement therapy (HRT) or tamoxifen
- Having a chronic illness such as lung disease, heart failure or inflammatory disease such as ulcerative colitis
- Being pregnant or less than six weeks after delivery or termination of pregnancy
- Being overweight (defined as Body Mass Index more than 30)
- Dehydration
- Smoking
- Varicose veins
- "Sticky Blood" conditions such as antiphospholipid syndrome or Factor V Leiden
- Travelling a long distance prior to your operation

If any of the above risk factors apply to you, please tell your doctor so we can plan your treatment accordingly.

## How can I reduce the risk of having a blood clot?

All patients will have an individual risk assessment for VTE when they are admitted to hospital. However before coming into hospital you can:

- Discuss stopping medicines containing hormones before surgery with your GP or surgeon (such as the oral contraceptive pill, HRT or tamoxifen)
- Keep a healthy weight
- Do regular exercise
- Avoid journeys of more than three hours in the month prior to your operation if possible

If a long journey is unavoidable then:

- Keep hydrated and avoid alcohol
- Exercise your calf muscles regularly; if possible by getting out of your seat and moving around or by moving your feet and legs
- Invest in a pair of medical stockings (flight socks) but only if they are a good fit. If they are not a good fit or you are unsure, do not use them; they can do more harm than good. You should also avoid these if you have ulcers or vascular disease in your legs

## When you are in hospital:

- Keep moving or walking; leg exercises are valuable
- Keep hydrated as much as possible
- You may be asked to wear anti-embolism stockings. You will be shown how to wear them and told to report any new pain or discomfort in your feet or legs. Your stockings should be removed for a short time each day so that you can have a wash and check your skin
- You may be asked to wear special inflatable sleeves around your legs while in bed. These will inflate automatically and provide pressure at regular intervals, increasing the blood flow in your legs. If they have been removed for more than three hours they should not be re-applied, unless agreed by a doctor
- You may have to have an injection or tablet to thin the blood.
- Ask your doctor or nurse “what is being done to reduce my risk of blood clots?”

## What happens when you go home?

- You should continue to wear your anti-embolism stockings throughout the day and night until you return to your usual level of mobility. They should be removed once a day for inspecting the skin and bathing and should then be put back on as soon as possible. The stockings are designed to be washed up to 30 times using a mild detergent by hand in warm water. Do not use oily products on the legs because these may affect the fabric of the stocking
- You may have to continue with your anti-clotting injections or tablets after you have been discharged. A nurse will teach you how to do this and give you all the information you require
- For the majority of patients, moving around and getting back to normal activities as soon as possible will be enough to reduce the risk of thrombosis when discharged home

## What if I have a long journey home?

If your journey home involves travelling three or more hours please continue to:

- Exercise your calf muscles regularly by moving your feet up and down every so often. If possible get up and walk around. This may mean breaking your journey
- Keep well hydrated
- Wear your anti-embolism stockings for the journey home

# References

- 1 Lifeblood: The Thrombosis Charity, Feb 2013.  
Venous Thrombosis [online] available at:  
[www.thrombosis-charity.org.uk/perch/resources/venous-thrombosis-crystal-mark-feb-2013.pdf](http://www.thrombosis-charity.org.uk/perch/resources/venous-thrombosis-crystal-mark-feb-2013.pdf)  
[accessed 19th May 2014]
- 2 Lifeblood: The Thrombosis Charity, Feb 2013.  
Do you know about hospital-acquired clots [online] available at:  
[www.thrombosis-charity.org.uk/perch/resources/do-you-know-about-hats-crystal-mark-feb-2013.pdf](http://www.thrombosis-charity.org.uk/perch/resources/do-you-know-about-hats-crystal-mark-feb-2013.pdf)  
[accessed 19th May 2014]

If you would like this leaflet translated into another language/large print, please contact the Quality Team on 020 8909 5439.

Royal National Orthopaedic Hospital NHS Trust  
Brockley Hill  
Stanmore  
Middlesex  
HA7 4LP

Switchboard: 020 3947 0100

[www.rnoh.nhs.uk](http://www.rnoh.nhs.uk)

Twitter: @RNOHnhs

18-209 © RNOH

Date of last review: October 2018

Date of next review: October 2020

Author: Dr Vijayaraghavan Ramesh, Consultant Anaesthetist