



**University  
Hospitals Sussex**  
NHS Foundation Trust

# Reducing the risk of blood clots with lower limb immobilisation

Advice for patients seen in the Emergency Department,  
Urgent Treatment Centres and Minor Injury Units.

Patient information

## What is this information about?

### This information explains:

- why there is a greater chance that you may get a blood clot when your lower limb is immobilised (you cannot move your lower limb freely). Your lower limb is every everything from your hip to your toes, including your hip, thigh, knee, leg, ankle, foot, and toes.
- how you can reduce the chance of getting a blood clot (usually a deep vein thrombosis (DVT) or a pulmonary embolism (PE)).
- symptoms to look out for that could mean you have a blood clot.
- what to do if you think you have a blood clot.

## Why have I been given this information?

You have been given this information because your lower limb has been immobilised. This means that you have had a plaster cast, or a special boot or brace fitted so that you cannot move your limb freely.

This helps your injury to heal but means that you may have a higher chance of getting a blood clot. Blood clots can be dangerous, but if you follow the advice in this information there is less chance that you will get one.

## What is a blood clot?

A blood clot is a blockage in a blood vessel (a vein or an artery) that stops your blood from flowing properly.

- A DVT is a blood clot that usually forms in a vein deep inside the leg. It often starts in the calf (the back of the lower leg) but can be in the thigh. A DVT can cause pain and swelling in the leg.
- If a DVT is not treated, a part of it can break off. This is called an embolus.
- PE. An embolus can travel through your veins to your heart and then into your lungs. It can become stuck in the blood vessels in your lung and stop your blood from flowing properly. This is called a pulmonary embolism (PE). A PE can make it difficult for you to breathe and give you chest pains. In a small number of people it can even cause death so we will do everything that we can to make sure you do not get a DVT or a PE.

## Is there a higher chance that I could get a DVT or PE because my lower limb is immobilised?

Yes. When your lower limb is immobilised or injured your blood cannot flow around it as well and this means that there is a higher chance that you may get a DVT or PE.

## Will a healthcare professional check whether I may need treatment to help prevent me from getting a DVT or PE?

A healthcare professional will check your chance of getting a blood clot if:

- you are over 16 years old and
- you have had your lower limb immobilised.

## What treatment might I need to help prevent me from getting a blood clot?

If there is a low chance of you getting a blood clot you will not need any treatment.

If there are things which mean you have a greater chance of getting a blood clot you may be given a medicine called an anticoagulant. This medicine thins your blood. It helps your blood to flow more quickly which means that there is less chance of you getting a blood clot.

## What things might mean there is a greater chance of me getting a blood clot?

Anyone can get a blood clot, but some things make it more likely. There is a greater chance of getting a blood clot if you:

- are over 50 years old
- are dehydrated (not drinking enough fluids)
- take certain medications, including combined oral contraceptive pill, contraceptive patch, or hormonal replacement therapy (HRT)
- smoke
- have an Achilles tendon rupture
- are overweight
- have cancer, heart disease, or lung disease

- have a disorder that makes your blood more likely to clot (a thrombophilia)
- have varicose veins
- have a close member of your family who has had a blood clot
- are pregnant or have had a baby in the last six weeks
- have had a hospital stay in the last six weeks.

## What can I do to help reduce my chance of getting blood clots?

### Do:

- stay well hydrated. Drink plenty of fluids.
- stop smoking (if you smoke). This will help you to heal.
- move around as much as you can. While you have to wear a cast anything you can do that uses your muscles and increases your blood flow is helpful.

## Are there any exercises that I can do that may help?

### Yes. Try to do these exercises regularly as often as you can:

- wiggle your toes. Try to do this for at least 10 seconds at a time.
- if your ankle is not immobilised and you can do so, move your ankle up and down. Repeat this 10 times.
- if you have a cast or boot which does not cover your knee, bend your knee, and then straighten it. Repeat this 10 times.

# What symptoms should I be aware of that might mean I have a DVT or PE?

## The symptoms of a DVT include:

- pain, swelling, or tenderness in your leg. It is more likely to be a DVT if the swelling is above the knee or is in a different part of your leg to your injury.
- a heavy aching or cramping pain in your injured leg, especially when you are moving around (mobilising).
- a painful rash of spots or patches under the skin which do not go away when you put pressure on them. In white skin these may appear pink or red. In brown or black skin, they may be darker.
- skin that is warm to touch.

## The symptoms of a PE include:

- sharp chest pain which starts suddenly
- fast breathing
- fast pulse rate
- shortness of breath, even when you are resting
- coughing up blood or a continual dry cough.

## **What must I do if I think I may have a blood clot (DVT or PE)?**

If you think you may have a blood clot (DVT or PE) do seek urgent medical advice straight away as you may need diagnosis or treatment without delay.

**Call NHS Direct on 111, or go to your nearest Minor Injuries Unit or Emergency Department (A&E).**

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