Preventing Blood Clots – Legs in Plaster Casts / Lower limb immobilisation

Information for patients

The purpose of this leaflet is to make patients aware of the risk of blood clots associated with limb immobilisation and how to reduce the risk of this happening.

Why have I been given this information leaflet?

Blood clots or Venous Thromboembolism (VTE) can be a complication of having a limb immobilised following a fracture or injury. You may have had the whole leg or some of your leg placed in a plaster cast, a splint or a protective boot.

As you will no longer be able to move the limb as freely as you were able to before the injury there is risk that a blood clot could form. This is usually in the deeper veins of the legs, which is commonly known as a Deep Vein Thrombosis or DVT. These can be very painful, resulting in swollen and sometimes discoloured calves. Sometimes bits of the clot can break up and lodge in the lungs causing a Pulmonary Embolism (PE) causing chest pain, difficulties with breathing and sometimes coughing up blood streaked sputum.

Am I at risk?

Blood normally flows quickly through veins, and does not normally clot. Blood flowing in the leg veins is helped along by movement of the legs, because muscle action squeezes the veins. Whilst your leg is immobilised you will find it difficult to have a full range of movement you are used to and may potentially be at risk of a DVT.

Your doctor or nurse will ensure that you have been properly risk assessed whilst in the Emergency Department and a decision will be made as to whether or not you will require medication to prevent you from developing a blood clot.

What medication will I need?

Some patients who have a lower limb immobilised may be at a higher risk of developing a DVT and will need to take some medication to prevent this from occurring.

The doctor or nurse will make the decision to commence you on medications when you are able to leave the department and advise you on when to stop taking them.

Anticoagulants (drugs that prevent clotting) may be used, in the form of a daily tablet or injection. If you require this medication you will need to continue taking it after you have attended hospital and the nurse will explain how to do this if it is necessary.

If you need help with administering injections at home, please ask the nurse attending to you.
What happens if I don’t need medication?

If your doctor or nurse has decided that you don’t need any anticoagulation medication, this is because you are at low risk of developing a blood clot. All patients will receive a follow up for the fracture clinic as an outpatient normally within 7 days.

How can I reduce the risk of developing a DVT?

It is difficult to predict who will get a blood clot, and there are steps that can be taken to try and reduce this risk:

- Drink plenty of fluids.
- Mobilise as much as is comfortable.
- Stop smoking (if you smoke) - this will also help your bone to heal.
- Perform the exercises described below.

**Exercises for reducing the risk of DVT in lower limb casts**

While you have to wear a cast, any activity which promotes contraction of muscles and increased blood flow is helpful.

**Try and do the following at least 3 times a day.**

**For any cast on the legs**

Wiggle your toes while lying in bed or whilst sat up with your leg elevated. Try and do this for at least 10 seconds, and as often as you can. This promotes blood flow and can help reduce the risk of blood clotting.

Inside the plaster cast, if it is safe to do so, try and move your ankle up and down. It will not move very much as the cast will stop it. Repeat 10 times.

**For below knee casts only**

Regularly bend your knee. Sit down, bend your knee and then straighten your knee. Repeat ten times.

Lie on your tummy on the bed and bend your knee, bringing your heel towards your bottom. Slowly lower your foot back down to the bed, keeping the movement slow and controlled.

Lie on the bed or sitting up with your leg elevated. Keep your leg straight and brace your knee down by tightening the muscles on the front of your thigh.

**How will I know if I have a DVT?**

When you have a DVT the blood flow in the vein is partially or completely blocked depending on the width of the clot. A calf vein is the common site for a DVT. A thigh vein is less commonly affected. Rarely, other deep veins in the body form clots.

The affected area of the blood clot may become swollen or painful, and possibly turn red or
feel hot to touch as the flow of the blood is blocked. You may also develop swelling, which is the build-up of fluid in the skin tissues surrounding the clot. If the clot is somewhere other than in your leg, there may be no physical signs of DVT.

Sometimes bits of the clot can break up and lodge in the lungs causing a Pulmonary Embolism (PE) causing chest pain, difficulties with breathing and coughing up blood streaked sputum.

Sometimes a DVT occurs for no apparent reason, and it becomes more common with age. Each year one in every 1,000 people in the UK is affected by DVT.

If you develop any of the signs or symptoms mentioned in this leaflet please seek medical attention immediately.

Where can I find out more?

Please ask your doctor or nurse for more information. Alternatively, the NHS Choices website provides patient information on blood clots: www.nhs.uk

PALS

The Patient Advice and Liaison Service (PALS) is a service that offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you. The PALS office is located on the ground floor of The Hillingdon Hospital NHS Foundation Trust - staff will be happy to direct you.

Tel: 01895 279973 Fax: 01895 279831 Email: pals@thh.nhs.uk

NHS 111 service

111 is the NHS non-emergency number. It’s fast, easy and free. Call 111 and speak to a highly trained adviser, supported by healthcare professionals.

NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

Languages/ Alternative Formats

Please ask if you require this information in other languages, large print or audio format.

Please contact: 01895 279973

Fadlan waydii haddii aad warbixintan ku rabto luqad ama hab kale. Fadlan la xidhiidh 01895 279 973

有意义的翻译：如果您有任何问题或疑虑，欢迎联系我们。请拨打01895 279973

بالتالي: المترجم: أليك ماهاران دركو
Jeżeli chciałbyś uzyskać te informacje w innym języku, w dużej czcionce lub w formacie audio, poproś pracownika oddziału o kontakt z biurem informacji pacjenta (patient information) pod numerem telefonu: 01895 279973.

If you need these data in another language, in large font, or in audio format, please contact the patient information office at phone number 01895 279973.

إذا كنت تود الحصول على هذه المعلومات بلغة أخرى، بالأحرف الكبيرة أو بشكل صوتي، يرجى الاتصال بالرقم التالي 01895279973.