

# Treatment of deep vein thrombosis and pulmonary embolism with low molecular weight heparin



You have been given this leaflet because you have a blood clot. Normally blood flows freely around the body without any problems. However if a blood clot forms in a vein it can stop the blood from flowing properly. If a clot forms in the leg this is known as Deep Vein Thrombosis (DVT) and can cause pain and swelling within the leg. Sometimes blood clots within the legs can move and travel to the lungs causing chest pain and shortness of breath. This type of blood clot is known as a Pulmonary Embolism.

### **Why have I developed a blood clot?**

The reasons why blood clots form within the veins are not fully understood. Unfortunately, patients who are known to have cancer are at a higher risk of developing a blood clot. In these cases blood clots can be caused by a number of factors such as:

- being admitted to hospital, particularly if this includes long periods of bed rest
- undergoing surgical procedures
- the insertion of central venous access catheters
- the effects of chemotherapy and other anti-cancer medications.

Being pregnant or having recently given birth can also cause blood clots to occur.

### **How are blood clots diagnosed?**

Blood clots in the legs (DVT) are usually diagnosed following an ultrasound scan. Pulmonary embolism is often diagnosed on a special CT scan. Patients with cancer are often found to have blood clots when they undergo routine scans as part of their cancer treatment. Often these clots give little or no symptoms but once found it is important to treat them.

### **How will my blood clot be treated?**

Your blood clot will be treated using anticoagulant or 'blood thinning' medication which is given to prevent the body from developing more blood clots.

## **What medication will I receive?**

You will receive a medication called Low Molecular Weight Heparin (LMWH) which is a blood thinner given as a once a day injection, apart from during pregnancy when it is usually given twice daily. You will be given a supply of LMWH to take home which will be in pre-filled syringes. The anticoagulant nursing team will show you or a family member/carer how to inject it. If you or your carer are unable to give this injection it will be possible to arrange for the community nurses to give this treatment to you.

The initial dose of LMWH you will be given is based upon your weight. After the first month of treatment this may be adjusted to a lower dose.

After the first month of treatment with LMWH if you are not pregnant you will be assessed for your suitability to be switched to a blood thinning tablet.

## **What are the benefits of this treatment?**

You will not need regular blood tests to measure your blood clotting. LMWH is not affected by chemotherapy or most other cancer treatments. Also, if you need an invasive procedure such as a biopsy LMWH can easily be stopped the day before and restarted after the procedure.

## **What are the risks of this treatment?**

LMWH can cause a rare condition called Heparin Induced Thrombocytopenia (HIT) which can result in a severe drop in the number of clotting cells (platelets) in the blood. It is not usually necessary to routinely check for HIT in most patients however it may be necessary to monitor your platelet count if you are receiving chemotherapy which may also cause a drop in your platelet count.

LMWH is a blood thinner and as a result it usually causes some bruising and occasional minor bleeding at the sites where it is injected.

## **Will I have any other problems with my treatment?**

If you take your medication as recommended you should not have any problems. However, it is important that you contact your GP or the anticoagulant nursing team if you:

- injure yourself, especially if the injury is to your head or eyes
- develop a rash, particularly if the rash consists of purple coloured spots
- develop any bleeding, especially if you vomit blood or your vomit looks like 'coffee grounds'
- pass red coloured urine or produce black faeces (stools)
- develop excessive painful bruising or 'lumpiness' where you are injecting your LMWH.

### **Will I need a follow up appointment?**

In some cases the anticoagulant nursing team will arrange to see you approximately one month after you start your treatment to see how you are managing and to address any concerns you may have. Where possible, this appointment will be made to coincide with other appointments you may have to help avoid any unnecessary trips to the hospital. If required, your dose of LMWH will be adjusted at this appointment.

### **What if I forget my injection?**

If you forget to have your injection inform whoever is monitoring your treatment as soon as you can. **DO NOT** have an extra injection to make up for one that you have missed.

### **When should I see my GP?**

Your GP will be informed that you have started anticoagulant therapy and will be given details of your treatment. You shouldn't need to see your GP unless you are experiencing any of the problems mentioned in this leaflet. If you do see your GP take this booklet with you as it contains your LMWH treatment plan.

### **Further information**

Further information about blood clots and treatment is available from Thrombosis UK, PO Box 58, Llanwdra SA19 0AD or online at: [www.thrombosisuk.org](http://www.thrombosisuk.org)

If you have any queries or worries about your treatment please contact the Thrombosis Nursing Team from Monday to Friday 9am-5pm at the Royal Cornwall Hospital on: 01872 253597.  
Outside of the above hours contact: 111

If you would like this leaflet in large print, braille, audio version or in another language, please contact the General Office on 01872 252690

## LMWH patient treatment record

Name: ..... Hospital no: .....

Indication for anticoagulation: .....

Date started: ..... Planned duration:.....

Name of drug: ..... Patient weight (kg): .....

Baseline platelet count: ..... Baseline eGFR: .....

### Details of appointments/patient care record

Date:	LMWH dose:	Comments:
	Platelet count:	
Date:	LMWH dose:	Comments:
	Platelet count:	
Date:	LMWH dose:	Comments:
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