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You are entitled to a copy of any letter we write about you. Please ask if you want one when you come to the hospital.

If you are unhappy with the advice you have been given by your GP, consultant, or another healthcare professional, you may ask for a second (or further) opinion.

The evidence used in the preparation of this leaflet is available on request. Please email: [patient.information@salisbury.nhs.uk](mailto:patient.information@salisbury.nhs.uk) if you would like a reference list.

Author: VTE Group  
Role: Multiprofessional Group  
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# ***Venous Thromboembolism (VTE) - preventing blood clots when you are in hospital*** (page 1 of 4)

## **What is DVT?**

DVT stands for deep vein thrombosis. It is a common medical condition that occurs when a thrombus (blood clot) forms in a deep vein, usually in the leg or pelvis, leading to either partially or completely blocked circulation. A DVT in itself is not a serious condition - however, it can cause a serious problem known as pulmonary embolus (PE).

## **What is PE?**

If the clot in the leg breaks off and travels to the lungs, it will cause pulmonary embolus (PE). PE normally results in breathing difficulties and may be fatal. Signs of a PE are:

- shortness of breath
- chest pain
- coughing up blood-streaked mucus.

If you experience any of these symptoms, seek immediate medical help.

DVT and PE are put together under the collective term of venous thromboembolism (VTE).

## **Why can a blood clot form?**

There are two factors that may trigger a clot to form:

**Changes or damage to the blood vessels** - if there is pressure on a vein a clot can form. This may be due to being immobile, surgery, or long distance travel.

**Problems with the blood** - this may be inherited (you are born with this condition), acquired (you develop this condition because of other health problems), and caused by some drugs or conditions such as pregnancy.

If you are dehydrated (have not drunk enough water) the blood can become more 'sticky', which can increase the risk of the blood forming a clot.

## **Who is most at risk?**

There are several factors which increase your chance of developing VTE. These include:

- having had a previous DVT or PE

- major surgery, particularly orthopaedic operations such as a joint replacement
- major trauma or lower limb injury
- aged over 60 years or a family history of DVT or PE
- advanced cancer and chemotherapy treatment for cancer
- faulty blood clotting i.e. thrombophilia
- recent medical illness (such as heart or lung disease, kidney failure or disease, recent heart attack, inflammatory conditions such as inflammatory bowel disease)
- smoking
- being obese (very overweight)
- pregnancy and recent delivery
- paralysis or immobility of the legs including staying in bed for a long time
- some types of contraceptive pill or HRT.

The risk of a blood clot forming after an operation ranges from 10% - 40% depending on the type of operation. Orthopaedic surgery carries the highest risk.

## Is travelling a risk?

Being immobile increases the risk of developing blood clots. If you travel for more than 3 hours at one time in the month before or after your surgery, your risk of a blood clot forming will be higher. If you have had major surgery, the risk is present for up to 3 months, particularly for long haul flights over 4 hours.

## How is VTE prevented in hospital?

Not all can be prevented, but the risk of developing a clot can be significantly reduced.

Either in the pre-admission clinic, or when you are admitted to hospital, your risk will be assessed by a doctor or nurse.

If you are considered to be at risk of VTE, a drug called heparin will be given to you. Heparin is given as a small injection once a day.

Some people who have had hip or knee replacements may be treated with different blood thinning treatment in the form of tablets.

If you are unable to have heparin injections or blood thinning tablets (because of a medical condition or the type of surgery you are having), you may be asked to wear compression stockings or use some other form of prevention.

## What can I do to help myself?

While doctors can do something to reduce your risk, there are some very necessary and simple things that you can do to help reduce it:

- make sure that you get up and about as soon as possible

- exercise your legs while in bed
- make sure you drink plenty unless your doctor has personally told you not to - water is particularly good for you.

## How effective is preventative treatment?

Heparin reduces the risk of developing a DVT by up to 50% and the risk of a PE by up to 65%. For some types of surgery or for people who might be immobile for a while it is recommended that the preventative treatment is continued for a longer period.

## What can I do once I go home?

Once home, it is important to:

- be as mobile as possible
- stop smoking - if you do smoke contact the NHS stop smoking service on 0800 169 0 169 for information and help. Alternatively log onto to the website [www.gosmokefree.nhs.uk](http://www.gosmokefree.nhs.uk)
- continue to drink plenty of water.

If you are asked to continue taking heparin when you go home, you will be given more information and another information booklet will be given to you.

If you have had your hip or knee replaced and are given blood thinning tablets in hospital, you will be asked to continue with this treatment once you get home. Further information will be given to you and you will be told how long you need to continue with this treatment.

But if you do not take the precautions that we have said, your risk of a blood clot and its complications will be higher.

## What are the symptoms of a DVT?

Typical symptoms in the leg include swelling, pain, calf tenderness and occasionally heat and redness compared to the other leg.

There may be no leg symptoms and the blood clot may only be diagnosed if a PE occurs.

There are other causes of a painful and swollen calf, particularly after injury or surgery so you should ask your GP to take a look. You will be asked to come to hospital as a matter of urgency if a DVT is suspected.

## What will happen if I get a blood clot?

As we've said, it is still possible to get a blood clot even if you have received heparin or are using other types of prevention. If you get any of the symptoms of a DVT please inform your doctor immediately. If required, you will be given treatment.

## Can VTE be treated?

Yes and the treatment is very effective if the symptoms are recognised early.

The aim of the treatment is to prevent the clot spreading and let it slowly dissolve.

## Further information

If you would like more information, please ask a member of the team caring for you.

Thrombosis UK, the thrombosis charity, provides detailed information about all aspects of thrombosis. Their aim is to 'stop the clots' through a programme of education and research.

Thrombosis UK  
PO Box 58  
Llanwrda  
SA19 0AD  
0300 772 9603

Or visit their website at: [www.thrombosisuk.org](http://www.thrombosisuk.org)