

Lifeblood: The Thrombosis Charity
The Centre for Haemostasis & Thrombosis
First Floor, North Wing
St. Thomas' Hospital
Lambeth Palace Road
LONDON SE1 7EH
Tele: 020 7633 9937
Email: lifeblood.charity@googlemail.com

LIFEBLOOD
THE
Thrombosis
CHARITY

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Dear Colleague



Re: Leaflet on DVT

On behalf of Lifeblood: The Thrombosis Charity I enclose 50 patient leaflets appertaining to the diagnosis and management of DVT. Please would you display them prominently in your surgery reception area.

These leaflets were commissioned by The Scottish Executive and written in conjunction with Mr Gordon McPherson whose daughter, Katie (pictured above), died age 23 from an undiagnosed pulmonary embolism in January 2003. Other cases in Scotland include Carolanne Douglas, a 43-year-old mother of three from Edinburgh, who died in August 2003 and Karen Johnstone, 28, from Kemnay, Aberdeenshire, who died in June 2006 after doctors at a local hospital had given her the all-clear for DVT.

If you would like additional copies of this leaflet, they are downloadable from our website at www.thrombosis-charity.org.uk

I hope these leaflets improve awareness of DVT and PE. 25,000 people die annually from PE in the UK, and probably half of these cases are as a result of hospital admission. Hospital-acquired DVT is the number one safety issue in UK hospitals, causing eleven times more deaths than MRSA. Lifeblood is campaigning to improve DVT awareness amongst health professionals and the public.

For more information about DVT, please visit our website.

Yours sincerely



Dr Beverley Hunt MD, FRCP, FRCPath
Medical Director
Lifeblood: The Thrombosis Charity

DEEP VEIN THROMBOSIS (DVT) ADVICE LEAFLET **Are You At Risk of Getting a Blood Clot?**

This leaflet is important reading for anyone who :

- 1 *Is pregnant*
- 2 *Is over 40 years old*
- 3 *Is not mobile*
- 4 *Is going into hospital*
- 5 *Has cancer*
- 6 *Is using the combined oral contraceptive pill (OCP) or hormone replacement therapy (HRT)*
- 7 *Is contemplating long-distance travel*
- 8 *Is obese*
- 9 *Has a family history of DVT*
- 10 *Has had a previous DVT or pulmonary embolism*
- 11 *Has thrombophilia - blood changes that predispose to DVT*
- 12 *Has a plaster cast*
- 13 *Has recently had surgery*
- 14 *Has no previous history, but has symptoms of DVT*

If you can tick more than one of these boxes your risk of having a thrombosis is greater than average and you should seek medical advice.

What is a DVT?

A *deep vein thrombosis (DVT)* is a clot which has formed in a deep vein, usually in the leg. It most commonly forms in the calf, but can also form in the thigh or in deep veins in other parts of the body. Deep veins are the larger veins that go through the muscles (not the veins you can see just below the surface of the skin) and carry blood towards the heart.

Why do blood clots form in the veins?

Blood normally flows quickly through the veins helped along by movement of the muscles which squeeze the veins and does not usually clot. Occasionally thrombosis sometimes occurs for no clear reason; however, there are certain circumstances which increase the risk of having a DVT e.g. immobility and damage to the vein walls, especially in people who may be more susceptible through genetic history.

What makes you more at risk of developing a DVT?

Pregnancy increases the risk of clotting and about 1 in 1000 pregnant women develop a DVT.

Age: Older people are more likely to have a DVT, particularly if they are immobile or have a serious medical condition such as cancer.

Immobility: Lack of mobility causes the flow of blood in the veins to slow leading to an increased likelihood of clotting.

Going into hospital: A surgical operation which lasts more than 30 minutes increases the risk too, especially in people more susceptible to DVT.

Cancer: Cancer and some chemotherapy drugs can damage the veins. Cancer patients are often less mobile, also increasing the chances of developing a DVT.

"The Pill" or Hormone Replacement Therapy: The oral contraceptive pill (OCP) and hormone replacement therapy (HRT) that contain oestrogen can increase the risk of a DVT.

Long distance travel: Long journeys by plane, train, or car cause a minor increase in the risk of DVT.

Family history: Some inherited conditions, such as Factor V Leiden, which causes the blood to clot more easily, can lead to an increased risk of DVT.

Obesity: Being significantly overweight increases your chances of developing a DVT.

What are the symptoms of a DVT?

The typical symptoms of DVT are pain and tenderness in the calf with a sensation of heat and swelling sometimes associated with skin discolouration, usually in the calf but sometimes the whole leg can be affected, particularly in pregnancy. However, 80% of DVTs produce no symptoms at all and are only diagnosed if a complication such as *pulmonary embolism* occurs.

What tests will I have?

It is often hard for a doctor to be sure of a diagnosis of DVT just from the symptoms, as pain and swelling in the calf can be caused by other reasons such as muscle strain or infection for example. If you have a suspected DVT you will normally be advised to have some tests done urgently to confirm the diagnosis. Two commonly used tests are:

- a. **The D-dimer test:** This is usually positive in DVT but can be positive in other conditions.
- b. **Ultrasound scan:** An ultrasound scan detects a clot in a vein and is used in most patients.

These tests are not 100% conclusive as there is no definitive test for DVT and more detailed tests may be necessary and may include for example a contrast venogram where dye is injected into the vein and then x-rayed to see if the blood flow is interrupted.

Is a DVT serious?

It can be a very serious and potentially life-threatening condition.

Pulmonary embolism (PE): This is when part of a blood clot breaks off and travels in the blood stream. It is called an embolus. The clot will be carried up into the larger veins, through the heart, and becomes lodged in the lung. This is called a pulmonary embolus (PE). Symptoms can include shortness of breath, either sudden or of gradual onset, chest pain which can be worse on breathing in and sudden collapse. The symptoms of DVT (pain, tenderness and swelling) may also be present.

What is the treatment for a DVT?

Treatment for DVT is anticoagulation with either heparin or warfarin, although there will be some new anticoagulant drugs soon. Heparin works by making the body's natural blood thinner work better. Warfarin takes a few days for the warfarin tablets to work fully and so heparin injections are often used for the first few days after diagnosis. You will need regular blood tests whilst you are on warfarin to ensure that the level is right - too much and you risk increased bleeding and too little may not stop more clots forming. If you are pregnant regular heparin injections may be continued in place of warfarin treatment. The length of time you will continue on treatment is usually 3 to 6 months. However, some people continue to have an increased risk of DVT and will need to stay on anticoagulation in the long-term. Your doctor or hospital specialist will advise you accordingly. You may also be advised to use compression stockings to compress the leg veins, which stimulates blood flow.

Preventing or reducing the risk of a DVT

Avoid prolonged periods of immobility such as sitting in a chair for many hours. If possible get up and walk around now and then or, even better, take regular exercise, for example a regular walk for 30-60 minutes a day. When going on long trips on planes, trains or in the car, get up and walk around every so often and perform calf exercises when sitting. Just being unwell and in hospital if you are undergoing surgery, particularly abdominal or orthopaedic, increases your chances of a DVT. You may already be at a higher risk just by your family medical history; this can be checked out by a simple blood test, which may show you have a genetic susceptibility to DVT.

This leaflet is not intended to be a comprehensive patient guide. If in doubt always seek additional information/advice from your GP, NHS 24 (08454242424) or your hospital specialist

This leaflet was produced in conjunction with Lifeblood: The Thrombosis Charity. Further information on venous thrombosis and other thrombosis-related topics and links can be found on their website at www.thrombosis-charity.org.uk

This leaflet was created in memory of Katie McPherson, who tragically died of a pulmonary embolism at the age of 23