

# DVT AND THROMBOPHLEBITIS

## Patient Information Fact Sheet

### ›What is DVT and thrombophlebitis?

Thrombophlebitis is a condition in which blood clots form abnormally in veins, usually the veins of the legs. The condition may be inherited in people with a family history of disorders of the blood-clotting mechanism. The blood clots are usually superficial (ie, close to the surface of the skin). Deep clots can cause DVT, which is more dangerous.

### ›What are the differences between thrombophlebitis and DVT?

Superficial thrombophlebitis causes a painful swelling along the course of the veins close to the surface of the skin. The pain may vary from moderate discomfort to a cramp-like pain. The pain gradually subsides over a period of one to two weeks, leaving hard clots that can be felt along the course of the veins.

DVT may be more difficult to diagnose as it may occur without signs or symptoms. There may be pain, swelling and tenderness; these occur most commonly in the calf, but may occur anywhere in the leg up to the groin. It is possible to confuse the symptoms of DVT with those of other conditions such as muscle strain or infection involving the skin or muscle. The danger of DVT is that the clot may dislodge and travel through the circulatory system to the lungs—a clot in the lungs is referred to as a pulmonary embolism (PE). A PE will cause shortness of breath and chest pain, and can be life-threatening. All DVTs must be treated immediately to prevent this occurring. Unfortunately, in some cases a PE may be the first sign of a DVT. Superficial thrombophlebitis is rarely associated with deep venous disease and experts say that it does not seem to be a risk factor for PE.

### ›What causes thrombophlebitis and DVT?

As mentioned above, abnormal blood clotting may be an inherited disorder that runs in some families. In addition, there are a number of major risk factors for DVT, including prolonged immobilization (eg, bed rest during illness), previous DVT and/or embolism, the presence of certain cancers, obesity and varicose veins.

The risk of DVT is also increased following surgery, particularly of the hip and knee, during pregnancy and around the time of childbirth. The risk of DVT is increased in people over the age of 40 and in young women taking combined hormonal contraceptives.

Some experts believe that long-haul air travel may cause DVT, as a result of long periods of immobility combined with dehydration that is often made worse by alcohol.

### ›Are there tests to diagnose thrombophlebitis and DVT?

A blood test can confirm if a person has inherited a familial clotting disorder. If DVT is suspected, a venous ultrasound (Duplex Doppler) will usually be performed to confirm the presence of blood clots in deep veins. A blood test known as a D-dimer test may also be performed if necessary. A lung scan can be used to detect a PE.

### › **How are thrombophlebitis and DVT treated?**

For superficial thrombophlebitis, the affected leg should be elevated regularly and heat applied to the area involved. Anti-inflammatory medications may be prescribed—either oral or topical creams or gels.

Treatment of DVT usually involves hospitalization and treatment with injections of a **low molecular weight heparin** (LMWH), an anticoagulant that thins the blood and reduces the possibility of a clot. LMWHs include **dalteparin** (Fragmin), **enoxaparin** (Lovenox), and **tinzaparin**. Daily injections of a LMWH may also be given to prevent the formation of DVT in patients considered to be at risk following surgery.

Other anticoagulants such as **standard heparin** may also be given by injection to break down blood clots. **Fondaparinux** (Arixtra) is another drug that may be used as an alternative to LMWHs or standard heparin in the initial treatment of DVT. Following treatment with injections (or sometimes in combination treatment), anti-coagulants such as **warfarin** will be prescribed. The dosage of these tablets is usually adjusted according to blood tests that show the blood clotting time; treatment needs to be continued for several months.

### › **Further Information**

National Institute of Health: [www.nlm.nih.gov/medlineplus/deepveinthrombosis.html](http://www.nlm.nih.gov/medlineplus/deepveinthrombosis.html)

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