

Deep Vein Thrombosis

What is deep vein thrombosis?

Deep Vein Thrombosis (DVT) is the formation of a blood clot in a deep vein.

DVT commonly affects the leg veins such as the femoral vein but can affect almost any vein in the body.

Commonly, this results in pain, swelling, warmth and redness of the affected limb. If the clot dislodges, it can travel to the lungs and cause a pulmonary embolism.

A DVT can occur as a result of several medical conditions like physical trauma, dehydration, cancer, or nephrotic syndrome. The risk for a DVT increases with certain factors including smoking, using the birth control pill, pregnancy, obesity, immobilization, long trips where one's activity is restricted, and inherited tendencies for thrombophilia like Factor V Leiden.

How is DVT diagnosed?

A DVT can be diagnosed using a blood test called a d-Dimer and imaging by ultrasound.

What are the symptoms of DVT?

The classic signs of a DVT are pain, redness, swelling and dilation of the surface veins in the affected limb.

How is DVT treated?

Blood thinner medications are the most common form of treatment for DVT. Typically patients are started on heparin for a short time and then transitioned to [warfarin](#) or [enoxaparin](#) for 3 to 6 months.

Patients who have infection in conjunction with a DVT are more likely to be kept on heparin for the entire treatment course.

Occasionally, for an extensive clot, thrombolysis is used. This involves injecting a medication into the vein and manually attempting to break the clot up.

Compression stockings may be used to aid blood flow back to the heart by exerting pressure on the affected limb. This prevents blood from pooling and reduces pain and swelling.

Post-thrombotic syndrome

Post-thrombotic syndrome is a long-term complication of DVT. It is due to chronic inability of the vein to bring blood back to the heart. Symptoms can include swelling, change in temperature, differences in limb circumference, varicose veins, pain, and skin changes.

For more information see the BC Children's Hospital "Post-thrombotic syndrome" leaflet.

How can I prevent DVT?

The mainstay of prevention is minimizing risk factors:

- Stay active with regular exercise
- Stay well hydrated
- Avoid obesity
- Don't smoke
- Don't take the birth control pill
- On long trips move around, stretch frequently and drink plenty of fluids
- Make sure any doctor who treats you knows you have a clotting risk
- If hospitalized and/or immobile for a prolonged period, anticoagulation may be beneficial
- Wear a compression stocking, especially on long trips or when your limb is feeling more swollen
- Elevate your limb when you are sitting for long periods

See the BC Children's Hospital "Blood clot prevention" leaflet for more information.

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