

Deep Vein Thrombosis (DVT)

Deep vein thrombosis (DVT) is a condition in which a blood clot (thrombus) forms in a deep vein in the body. The blood clot can partially or totally block blood flow in the vein. Deep vein thrombosis occurs most often in the leg veins. The blood clot can break off and travel to the lungs, resulting in a pulmonary embolus, which can be life-threatening.

*Please discuss
any questions
or concerns
you might
have about
DVT with us.*

Risk Factors

Risk factors for DVT include:

- Immobility, such as long car or airplane trips
- Recent surgery
- Stroke
- Trauma
- Pregnancy
- Estrogen (birth control or hormone replacement therapy)
- Coagulation disorders (tendency for the blood to clot)
- Cancer
- Over 60 years of age
- History of DVT or pulmonary embolus
- Obesity
- Heart failure

For some patients, a hospital stay with a decrease in activity level also can increase their DVT risk.

Symptoms

The symptoms depend on the size and location of the blood clot and can include:

- Leg or arm pain or discomfort
- Sudden swelling in one leg or arm
- Change in skin color of leg or arm (bluish or reddish color)
- Dilation of superficial veins

In some cases, DVT may not cause any symptoms.

Prevention

Hospital

In the hospital, all patients are assessed to find out their DVT risk. If you are at risk, certain steps will be taken to help prevent blood clots from forming. These may include:

- Low-dose “blood-thinning” medications (prophylaxis)
- Knee- or thigh-high elastic stockings
- Sequential compression devices (SCDs)

Elastic stockings promote blood flow back to the heart. SCDs gently squeeze your calves to promote blood flow to the heart.

At Home

- Know the risk factors and signs of DVT. If you are at risk for DVT, talk with your doctor. Anticoagulant medications (blood thinners) or compression stockings may be used in high-risk patients or those having certain types of medical procedures or surgery.
- Avoid prolonged sitting. It is helpful to stand up and walk at least every hour.
- Wear elastic compression stockings to promote blood flow on long trips in a car or airplane. This is important if you have a history of DVT or pulmonary embolus.
- Get regular exercise (a few minutes every hour) on long car or airplane rides. Exercise both feet while lying, sitting or standing for long periods of time.
- Stop any medications (e.g., estrogen) that contribute to blood clotting as directed by your doctor. This is important before any surgery.
- Avoid tight clothing that can restrict blood flow.

Treatment

Medicines

A blood thinner may be used to prevent:

- An existing blood clot from getting larger
- New blood clots from forming

This medicine does not thin the blood or dissolve blood clots that already have formed.

The blood thinners may be given by:

- IV (into the vein) line
- Injection into the skin
- Mouth (orally)

Blood thinners often are given in two forms. At first, they are given IV or by injection along with the oral medication. Then, oral medicine (warfarin) may be given alone.

Your doctor will use blood tests to select the correct dose of medication. These blood tests are called the international normalized ratio (INR) or prothrombin time (PT).

Your doctor will decide how long you will need to take blood thinners.

In rare cases, a thrombolytic medicine may be used to dissolve the blood clot.

Surgery

When a blood thinner cannot be used, a filter may be placed in the vena cava (the large vein in the abdomen). The filter prevents blood clots from traveling to your lung.

Other Treatment

Leg Elevation

- Elevate the affected arm or leg above the level of the heart.
- Use compression bandages or stockings.
- Wear bandages or stockings to assist blood flow back to the heart. Your doctor may give you a prescription for compression stockings.

Bed Rest

Bed rest may be ordered depending on the location of the blood clot in your body.

When to Notify Your Doctor or Nurse

Report any sudden onset of swelling of the leg or arm or any other DVT symptoms.

Seek medical attention right away if you have:

- Chest pain or discomfort
- Shortness of breath or rapid breathing
- Cough, sudden onset of bloody sputum
- Rapid heart rate
- Fainting
- Sudden, unexplained pain, redness or swelling of an extremity

Health Information Resources

For more information, visit one of Northwestern Memorial Hospital's Health Learning Centers. These state-of-the-art health libraries are located on the third floor of the Galter Pavilion and on the first floor of the Prentice Women's Hospital. Health information professionals are available to help you find the information you need and provide you with personalized support at no charge. You may contact the Health Learning Centers by calling 312-926-LINK (5465) or by sending an e-mail to hlc@nmh.org.

For additional information about Northwestern Memorial Hospital, please visit our Web site at www.nmh.org.

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Developed by: Surgical Nursing and the Division of Vascular Surgery
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