



What is Deep Vein Thrombosis (DVT)?

Deep vein thrombosis, commonly referred to as “DVT,” occurs when a blood clot, or thrombus, develops in the large veins of the legs or pelvic area. Sometimes these clots can break loose and lodge in the arteries of the lungs causing a serious condition known as pulmonary embolism (PE). PE is a serious condition which requires immediate medical attention.

Risk Factors for DVT

- Recent major surgery
- Cancer and its treatment
- Major trauma or injuries to the leg
- Previous DVT or PE
- Hospitalization with an acute medical illness
- Recent immobility
- Pregnancy
- Use of the birth control pill or hormone replacement therapy
- Family history of DVT or PE
- Obesity

While uncommon, long airline flights of more than four hours can slightly increase the risk of DVT.

How Great is the Risk for DVT and Air Travel?

A number of recent reports have linked blood clots with air travel, especially long flights of over four hours, but the overall risk appears to be very low. In one research study, only one in 200,000 persons had any signs and symptoms of serious PE diagnosed within one hour of arrival. In addition to the primary risk factors for DVT there is an increased risk for developing blood clots in persons with heart and lung disease.

Conditions increasing the risk for DVT include prolonged immobility, possible concentration or “thickening” of the blood due to dehydration, and increased clotting due to reduced oxygen levels in the cabin.

Preventive Measures

For most people, the risk for clots appears to be low, so reasonable preventive steps include drinking plenty of non-alcoholic drinks to avoid dehydration. Stretching and flexing the leg muscles, moving the feet and walking in the aisles during a long flight is encouraged. Compression stockings are helpful to decrease leg swelling and help the venous circulation to return blood to the heart and may prevent DVT. For those with risk factors for known DVT, especially with flights of more than about 3,000 miles, it would be wise to consult with a physician. Your physician may recommend an injection of a dose of blood thinner before a long flight.

Fast Facts

- More people suffer from DVT annually than from heart attack or stroke
- Each year up to one million Americans are affected by DVT and up to 600,000 are hospitalized
- Approximately one-half of those with a DVT never have recognized symptoms
- DVT affects men and women, all ethnic groups and all social levels
- It is seen most often in adults over the age of 40, and more frequently in elderly patients, but can occur at any age

Signs and Symptoms of DVT

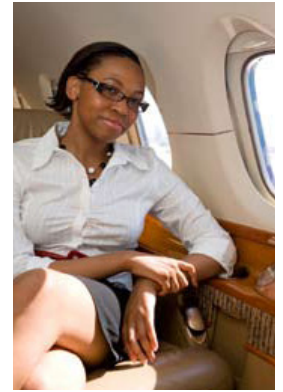
Approximately one-half of those with a DVT never have recognized symptoms. When symptoms are present, the most common is leg pain and tenderness in the calf muscles, or one may observe swelling or a change in color of one leg to purple or blue. These signs and symptoms may appear suddenly or may steadily develop over a short time. If you observe these signs or symptoms you should contact your doctor immediately.

Common Signs and Symptoms of DVT:

These symptoms can develop slowly or suddenly. If you have any of these symptoms, contact your doctor immediately.

- Sudden swelling of one limb
- Pain or tenderness
- Skin that is warm to the touch
- Fullness of the veins just beneath the skin
- Change in color (blue, red or very pale)

The signs and symptoms of these disorders (DVT and PE) can vary by individual and event. Some individuals may also experience uncommon symptoms such as dizziness, back pain or wheezing.



Symptoms are quite different if the clot breaks loose and travels to the lungs, causing a pulmonary embolism (PE). The symptoms of PE include chest pain, shortness of breath, rapid pulse or a cough. There may also be a feeling of apprehension, sweating, or fainting. Such symptoms are not specific to a PE, and can occur with pneumonia, heart attack and other medical conditions.

Common Signs and Symptoms of PE:

PE can be fatal. If you experience these signs or symptoms, seek medical attention right away.

- Shortness of breath
- Sudden chest pain
- A feeling of apprehension
- Sudden collapse
- Coughing
- Sweating
- Bloody phlegm (coughing up blood)

Some Tips to Avoid DVT

- Do not sit for long periods of time
- Elevate legs if you are sitting for moderate periods of time
- If you are on an airplane for more than four hours-get up and walk in the aisles, pump your feet up and down
- If you are flying, drink plenty of non-alcoholic beverages
- Keep hydrated-drink six glasses of water a day
- Talk to your doctor about the need for medications or graduated elastic compression stockings for long airplane flights
- If you have varicose veins, wear support hose (especially if pregnant)
- Do not wear constricting garments around the legs or waist (elastic bands or garters)

This educational resource was created by the Vascular Disease Foundation (VDF). VDF ceased operations in January 2014. In October 2014, Vascular Cures acquired most of VDF's digital assets and educational resources. VDF was founded in 1998 with the mission to provide public education and improving awareness about vascular diseases. Vascular Cures is now the only organization in the country dedicated exclusively to finding cures for vascular disease and to providing resources, information and education to patients with vascular diseases outside the heart. Please help Vascular Cures continue to make this critical educational information available. Your contribution will make saving lives a greater reality. Make a donation today at: www.vascularcures.org.