

COMMON CAUSES

- Any acute illness that requires hospitalization/prolonged immobilization
- Prolonged sitting past your norm without the ability to range and stretch especially over 4 hours
- Trauma
- External pressure anywhere on the legs or arms, especially on the back of the knee, groin, elbow or underarm
- Constrictive clothing such as elastic leg bag bands, wrinkled or rolled stockings or socks, constrictive pants or shirts
- Some cardiac abnormalities like arrhythmia
- Predisposition to increased blood clotting
- Increasing age
- Oral contraceptives or hormone replacement therapy
- Surgery
- Previous blood clot creates higher risk for a new one
- Genetic predisposition

As appropriate, notify your Healthcare Professional of your important DVT health history:

- I have paralysis or spinal cord injury which puts me at high risk for a DVT.
- I have had a previous DVT or I have a family history of DVT.
- I take blood thinners to prevent DVT or I have recently stopped taking blood thinners for DVT.

MY INFORMATION

Name:

MEDICAL HISTORY

Baseline Blood Pressure:

Baseline Body Temperature:

Neurological Location of Injury:

Primary Healthcare Provider:

Phone Number:

Allergies:

EMERGENCY CONTACT

In Case of Emergency Call:

Relationship:

Phone Number:

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Deep Vein Thrombosis (DVT)

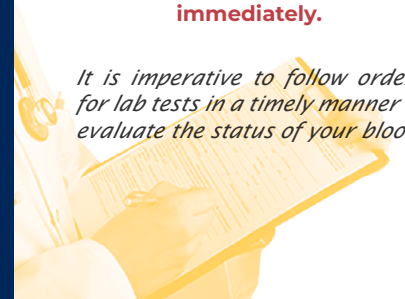


WHAT IT IS

Deep Vein Thrombosis (DVT) is a blood clot, most often found in the leg or the arm, which can lead to lack of blood flow to the extremity causing internal tissue damage, edema (swelling) and skin breakdown. The clot can break loose, and travel to the lungs causing a pulmonary embolism (PE), which can affect breathing and heart function, or to the brain which can lead to a stroke and death. If you receive a spinal cord injury (SCI), the risk for a blood clot begins 72 hours after initial injury and lasts throughout life. Most individuals develop a blood clot after SCI. Almost half of those treated for blood clots will develop other clots.

Deep Vein Thrombosis is a medical emergency. See your healthcare provider immediately.

It is imperative to follow orders for lab tests in a timely manner to evaluate the status of your blood.



To the Healthcare Provider or First Responder

Diagnosis of DVT can be difficult in the individual with paralysis/SCI due to lack of sensation and ability to report pain. Testing is indicated if a DVT is suspected. Most individuals with traumatic SCI will have intravenous filters, which can decrease blood flow return from the limbs to the heart, thus increasing the likelihood of DVT, but will prevent the clot from traveling to the pulmonary artery.

The risk of DVT in SCI is increased due to Virchow's Triad:

- Venous Stasis
- Hypercoagulability
- Intimal Injury

Watch and treat for autonomic dysreflexia as appropriate.

Treatment for individuals with paralysis is the same as for any individual.

COMMON TESTS FOR DVT

- Doppler Ultrasonography—preferred
- Radiopaque Venography
- D-dimer assay
- V/Q Scan or Spiral CT for PE

Editorial Review by:

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WHAT TO DO AFTER DIAGNOSIS

- Compression or pneumatic stockings
- Blood thinners (anticoagulation)
 - Low-molecular-weight heparin (best choice in SCI)
 - Unfractionated heparin
 - Warfarin
- Surgery
 - Filter placed in the blood vessel to block clot passage (invasive with high risk).
 - Thromboembolectomy (removal of the clot(s))
- Clot dissolving (clot buster) drugs
 - Tissue plasminogen activator t-PA
 - Urokinase
 - Streptokinase

COMMON SIGNS AND SYMPTOMS OF DVT

- Leg or arm swelling
- Tenderness in the calf, thigh or arm
- Skin over the affected area will be warmer
- Redness or whitish discoloration over affected area
- Pain
- Low-grade fever
- Symptoms of autonomic dysreflexia if the neurologic level of injury is T6 or above



International Center for Spinal Cord Injury
at Kennedy Krieger Institute
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COMMON SIGNS AND SYMPTOMS OF PULMONARY EMBOLISM

- Chest pain
- Shortness of breath
- Coughing up blood
- Feeling of impending doom
- Fast or slow heartbeat
- Change in mental status
- Fever
- Noisy breathing

TIPS TO AVOID DVT

- Don't 'hook' your arm on the back of your chair
- Avoid crossing your legs
- Don't let your chair hit the back of your knees while sitting
- Adjust your clothes so they are not tight, especially at underarm or groin
- Wear non-wrinkled or non-rolled anti-embolic stockings
- Loosely wear leg bag straps
- Avoid oral contraceptives and hormone replacement
- Stop smoking
- Be gentle moving your limbs
- Inspect extremities often, use mirror as needed
- Don't massage arms or legs



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