

## DEEP VEIN THROMBOSIS (DVT)

### What is DVT

- It is a clot that forms inside a vein, usually within your leg.
- About half a million Americans every year get one, or up to 100,000 die because of it.
- The danger is that part of the clot can break off and travel through your bloodstream.
- It could get stuck in your lungs, heart, brain and block blood flow, causing organ damage or death.
- DVT is the primary cause of fatal and nonfatal pulmonary embolism (PE).

### ASSESSMENT FOR DVT

The most important assessment is to obtain a complete health history to include clinical at risk factors.

Patients considered to among the highest at risk of developing DVT are those who have:

- Previous history of venous thrombosis is considered to be one of the strongest indicators that a patient will develop DVT in the future, family history.
- Cancer.
- Have had surgery, orthopedic surgery, especially total hip replacement and total knee replacement.
- Are on extended bed rest.
- Are older.
- Smoke.
- Are overweight or obese.
- Sitting for long periods of time during travel or sedentary lifestyle.
- Taking hormonal therapy or birth control pills.
- Pregnancy postpartum.

### SYMPTOMS OF DVT

- About half of the people with DVT get no warning signs.
- Swelling below the knee.

- Redness and tenderness or pain in the area of the clot.
- Soreness or pain when standing or walking, which is usually alleviated with rest and elevation of the leg.
- Ankle enlargement.
- Functional impairment.
- Difference in leg circumference bilaterally.

Homan's sign test is a physical examination technique taught in many healthcare profession curriculums, typically as a component of lower extremity vascular assessment. Over time, the Homan's sign has not proven to be a clinically significant physical assessment tool for DVT.

#### DIAGNOSIS OF DVT

- Ascending contrast venography is considered the most accurate diagnostic test for distal and proximal DVT, the test is invasive.
- Ultrasound is the most common way to confirm a diagnosis of obstruction of the popliteal and those veins proximal to it.
- Impedance Plethysmography measures the volume changes in the leg during temporary occlusion of the venous system, is noninvasive and accurate in detecting obstruction of the proximal veins.

#### TREATMENT FOR DVT

Treatment is aimed at preventing the clot from getting any bigger, as well as preventing the clot from breaking loose and causing a pulmonary embolism.

- Blood thinners or anticoagulants, they don't really, thin the blood they just make it less sticky to prevent clots from forming.
- Clot busters- thrombolytics administered by IV to break up blood clots also can be administered directly into the clot.
- Filters may be inserted into the large vena cava in your abdomen to prevent clots from lodging in lungs.
- Compression stockings apply gentle pressure on your legs to keep the blood moving, reduce swelling and relieve discomfort.

## PREVENTION OF DVT

- After surgery or prolonged bedrest, try to get moving as soon as possible.
- Keep feet elevated when sitting to make it easier for the blood in your veins to flow up toward your heart, also can lessen the swelling and discomfort.
- Exercise to use your muscles to promote blood flow.
- Avoid sitting still, do not cross legs.
- When sitting at your desk stand up and walk around every couple of hours.
- When traveling more than 4 hours avoid tight clothing, drink plenty of water, and get up and walk around every couple of hours.
- If up able to get up stretch and move your legs, clench and release your calves and thighs or lift and lower your heels with your toes on the floor.
- Lose weight.
- Quit smoking.

Just a few interesting facts I came across

The Homan's sign has been found to be positive less than 50%.

Physical examination is only 30% accurate for DVT.

Large, extensive thrombi can develop rapidly within minutes.

The embolic risk is highest during the first few days after DVT formation