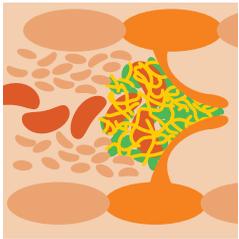


# Diagnosing Deep Vein Thrombosis

from diagnosis,  
the seeds of better health



# Diagnosing Deep Vein Thrombosis



## What is Deep Vein Thrombosis ?

Deep vein thrombosis - or DVT - is caused by the formation of a blood clot (thrombus) in a vein. Most often occurring in the veins of the lower limbs, it affects both men and women indifferently. Leg veins are more concerned than other veins in the body, since the blood flow is slower and the veins more dilated, which favors the formation of a clot.

## What are the complications ?

If a blood clot breaks loose from the wall of a vein, it can dissolve and travel through the bloodstream to the lungs, where it may block the pulmonary artery or one of its branches. This leads to a severe respiratory complication known as pulmonary embolism.

## What are the symptoms ?

Sudden pain in the calf, cramps, redness, tenderness, warmth, a swelling in the leg or a slight fever can indicate a diagnosis of DVT. However, these symptoms are not usually all present, and may even be totally absent. Even today, it is not uncommon that deep vein thrombosis is only diagnosed at the stage of pulmonary embolism, in the event of shortness of breath following surgery, for example.

## What are the risk factors ?

Some situations increase the risk of DVT :

- Age
- Past history of DVT
- Surgery
- Cancer
- Prolonged immobility (extended bed rest, paralysis, long flights...)
- Pregnancy
- Catheterisation
- Varicose veins
- Obesity

## What is the role of the analysis laboratory in diagnosing DVT ?

When suspected, the presence of DVT requiring treatment can be reliably excluded by a D-Dimer test. Performed by simply taking a blood sample, the D-Dimer test provides rapid results. If the test result is negative (D-Dimer level  $<500$  ng/ml), the presence of a large clot requiring anticoagulant therapy can be reasonably excluded. D-Dimer is a fragment produced during the degradation of a clot.

## Does a positive D-Dimer result ( $>500$ ng/ml) confirm a diagnosis of DVT ?

No. D-Dimer levels may be high in other clinical situations. Only a negative result, obtained using a sensitive technique, can provide an exclusion diagnosis. If the result is positive, your doctor may prescribe a Doppler ultrasound examination.

