

Deep Vein Thrombosis – pulmonary embolism

If a blood clot forms in a deep vein, it could disrupt blood flow and produce inflammation in that area. This is called **deep vein thrombosis (DVT)**. More so, if a clot breaks and a part of it circulates to other organs, it could stop circulation in them. If it gets to the lungs, then it is called a **pulmonary embolism (PE)**.

Causes

Clots form more frequently due to being immobilised for extended periods of time (prolonged rest, surgery). Some other factors include: age, overweight, tobacco, birth control pills, pregnancy and labor, cancer, high levels of cholesterol, diabetes, blood disorders, heart disease (fibrillation, congenital cardiopathy, heart failure) and some hereditary illnesses.

Deep vein thrombosis

DVT consists of the formation of blood clots in a deep vein of your legs or the inferior pelvis. Less commonly, it can also affect other deep veins, such as those of the arms.

What discomfort can it cause?

- **Swelling or inflammation of the affected leg.**
- Leg pain or tenderness, which often starts in the calf
- **Increased temperature** in the affected leg
- **Changes in leg color** (redness or bluish, and shiny)

How is it diagnosed?

It is diagnosed by evaluating the discomfort it causes. The doctor will examine the leg and, if necessary, will order a blood test (D-Dimer test) and a vascular ultrasound.

Pulmonary embolism (PE)

If the clot travels up the veins towards the heart and reaches the lungs, it can block one or more of the pulmonary arteries restricting blood flow: that's a PE.

What discomfort can it cause?

Shortness of breath (often occurring suddenly and made worse by lying down), increased respiration

or heart rate, sharp chest pain and dry cough. In rare cases, coughing up blood, dizziness or syncope may occur.

How is it diagnosed?

If the doctor suspects PE, they will confirm it with various tests, such as a **chest computed tomography (CT) scan**, a lung scintigraphy or a lung ultrasound. A D-Dimer **blood test** can also be done.

How is it treated?

The main treatment aim is to **dissolve the clot** and restore blood circulation to prevent further complications. **Anticoagulants are used to help dissolve the blood clot** and prevent new ones from forming. In some cases, **surgery** is required to repair the damage created by the clot or prevent the formation of new clots.

It is recommended to avoid the major causes of PE, such as immobility and development of varicose veins. It is recommended to do some [light exercise](#) to strengthen the leg muscles and to increase the intensity of the workouts **when the clot has dissolved**. For PE, it is also recommended to do [respiratory rehabilitation](#) to improve **pulmonary efficiency**.

Prevention

The best prevention is a [healthy diet](#), [exercise](#), [no smoking](#), **avoiding immobility and monitoring diseases that can cause clots**.

One of the most affordable and effective ways to help prevent possible clots or embolisms is to **walk**, since movement prevents clot formation.

