

Deep Vein Thrombosis (DVT) and Pulmonary Embolism (PE)

While the exact number of people affected by either a Deep Vein Thrombosis (DVT) or Pulmonary Embolism (PE) is unknown, the CDC and other medical organizations estimate that they could affect as many as 900,000 people each year. White Plains Hospital's Interventional Radiologists, Interventional Cardiologists, and Vascular Surgeons are here to help those suffering from DVT or PE to receive the expert support and care they need.

DVT Causes and Symptoms

A DVT occurs when a blood clot (or thrombi) forms in a deep vein, usually in the leg or pelvis, usually due to slow blood flow or an increased clotting tendency. DVT can occur in anyone, but the presence of more than one of the following factors can increase your risk:

- Surgery
- Trauma
- Long periods of not moving (bed rest, sitting, long car or airplane trips)
- Cancer and cancer therapy
- Family history of DVT
- Increasing age
- Pregnancy and the 4–6 weeks after giving birth
- Use of birth control methods that contain estrogen or hormone therapy for menopause symptoms
- Certain illnesses, including heart failure, inflammatory bowel disease, and some kidney disorders
- Obesity
- Smoking
- Varicose veins
- Having a tube in a main vein (sometimes needed to give medications over time)
- Having thrombophilia, one of several diseases in which the blood does not clot correctly

DVT symptoms can include:

- Leg swelling
- Constant pain in one leg while standing or walking
- Unusual warmth or tenderness
- A change in the color of the skin (typically red or purple).
- *The most dangerous development: the creation of a PE.*

A **PE** is a potentially fatal condition caused when the DVT clot breaks off and travels (usually from the leg) to the lungs, where it blocks and stops blood flow to an artery in the lung. This results in a lowering of the oxygen levels in your lungs and increased blood pressure in your pulmonary arteries. Symptoms can include:

- A sudden cough, which may produce blood
- Sudden shortness of breath
- Pain in the ribs when breathing
- Sharp chest pain under the breast or on one side
- Burning, aching, or dull, heavy feeling in the chest
- Rapid breathing
- Rapid heart rate

You should go to the hospital immediately (call 911) for a suspected PE.

Deep Vein Thrombosis (DVT) and Pulmonary Embolism (PE)

DVT Treatments

While there is no cure for either DVT or PE, there are many effective treatments that can help you return to your usual routines.

Treatments for DVT and PE are very similar, but remember: **Treating a PE right away helps prevent serious complications and reduces the risk of death.** Following are some general explanations of what recommendations you may receive; depending on the severity of your situation, your medical professional may prefer other or additional treatments.

Blood thinners (anticoagulants), medications that both help prevent existing blood clots from getting larger and reduce the risk of new clots forming—giving your body time to naturally break down the clot and heal. Oral examples include Warfarin (Coumadin), Xarelto (rivaroxaban), and Edoxaban (Savaysa). More serious cases may require medication delivered by IV or injection at the Hospital.

Thrombolytics (clot busters) like a tissue plasminogen activator (tPA), streptokinase, and urokinase can rapidly dissolve DVT, though they pose a higher risk of major bleeding; they are typically delivered via catheter directly to the clot.

Thrombectomy, a catheter-based procedure to physically remove the clot, restoring blood flow and potentially preventing vein damage.

In some cases, during a thrombectomy your surgeon may also employ a **stent(s)**, a small mesh tube to prop the vein open and prevent it from narrowing again; **angioplasty**, which involves inserting a balloon-tipped catheter to open blocked veins and restore blood flow; or a temporary **caval filter**, placed in the vena cava (the large vein) to catch clots from traveling to the lungs.

White Plains Hospital specialists collaborate with patients to develop individualized, comprehensive strategies for the prevention and treatment of Deep Vein Thrombosis and Pulmonary Embolism.

For our Interventional Radiology, Interventional Cardiology, and Vascular Surgery providers, please visit <https://www.wphospital.org/services/cardiac-services-program/> or call 914-849-MYMD (6963).