



What is Pulmonary Embolism (PE)?

Pulmonary Embolism (PE) is a blood clot that lodges in the lung arteries. The blood clot forms in the leg, pelvic, or arm veins, then breaks off from the vein wall and travels through the heart into the lung arteries. Most PEs are due to pelvic and upper leg blood clots that first grow to a large size in the vein before detaching and traveling to the lungs. PE can cause death or chronic shortness of breath from high lung artery pressures (“pulmonary hypertension”). PE can impair heart muscle function, especially the right ventricle, which pumps blood into the lung arteries.



Risk factors

Risk factors include immobility, smoking cigarettes, being overweight, and having high blood pressure—all of which can be potentially controlled with a heart healthy lifestyle. A recent study showed that eating fruits and vegetables can be protective against developing PE. However, people who frequently eat red meat had double the risk of developing PE. Other risk factors for PE include cancer, long airline flights, surgery and trauma. PE is also associated with women’s health issues such as use of birth control pills, pregnancy and hormone replacement therapy. Certain genetic mutations predispose to PE, such as “factor V Leiden” and the “prothrombin gene mutation.”

Symptoms

The most common symptom is unexplained shortness of breath and/or chest pain with difficulty breathing. However, PE can be difficult to diagnose and has been called “the Great Masquerader.” It can mimic pneumonia, congestive heart failure, and a viral illness known as pleurisy.

Critical Limb Ischemia

- Shortness of breath
- Chest pain, often worse when taking a breath
- A feeling of apprehension
- Sudden collapse
- Coughing
- Sweating
- Bloody phlegm (coughing up blood)

The signs and symptoms of these disorders can vary by individual and event. Some individuals may also experience uncommon symptoms such as dizziness, back pain or wheezing. Because PE can be fatal, if you experience these signs or symptoms seek medical attention right away.

Diagnosis

A definitive diagnosis of PE must be made in a hospital or clinic with radiology facilities. A chest CT scan (“CAT scan”) or a nuclear medicine scan are the most common tests to diagnosis PE. The most crucial point is for patients and their health care providers to consider the possibility of PE. Prior to a chest CT scanning or a nuclear medicine scan, doctors may determine the likelihood of PE through screening tests such as a chest X-ray, electrocardiogram and a blood test called a “D-dimer” (low D-dimer levels virtually exclude PE).

