



BASIC INFORMATION

DESCRIPTION

A blood clot in one of the arteries carrying blood to the lungs. The blood clot usually begins in a deep vein of the leg, or less often, another place in the body. The clot moves through the bloodstream, passing through the heart and into an artery in the lungs. The blockage reduces breathing ability and can destroy lung tissue. Rarely, other types of clots form that are made up of fat, air bubbles, tissue from a tumor, or bacteria. Pulmonary embolism is more common in adults.

FREQUENT SIGNS AND SYMPTOMS

- Sudden shortness of breath.
- Faintness or fainting.
- Pain in the chest.
- Cough (sometimes with bloody sputum).
- Rapid heartbeat.
- Low fever.
- These symptoms are often preceded by swelling and pain in the leg.

CAUSES

Deep-vein thrombosis, which can occur anytime blood pools in a vein.

RISK INCREASES WITH

- Previous embolism or deep-vein thrombosis.
- Any injury or illness that requires prolonged bed rest.
- Sitting for long periods, as on car or plane trips.
- Recent surgery.
- Heart disease, high blood pressure, or lung disorders.
- Bone fractures, such as hip fracture.
- Overweight.
- Pregnancy.
- Use of birth-control pills; risk increases with smokers.
- Cancer.
- Smoking.
- Family history of tendency to form blood clots.

PREVENTIVE MEASURES

- Avoid prolonged bed rest during illnesses. Wear compressive stockings during recovery (in or out of bed).
- Start moving legs and walking as soon as possible after surgery.
- Don't smoke, especially if you are a woman age 35 or older who takes birth-control pills.
- When traveling, stand and walk every 1 to 2 hours.

EXPECTED OUTCOMES

Usually curable with treatment. Embolism may recur.

POSSIBLE COMPLICATIONS

- High blood pressure in the lungs (pulmonary hypertension).
- Heart damage (a condition called cor pulmonale).
- Death (from a large clot that blocks the artery).



DIAGNOSIS & TREATMENT

GENERAL MEASURES

- Your health care provider will do a physical exam and ask questions about your symptoms and activities. Medical tests may include chest x-ray, lung scan, pulmonary angiogram (a special x-ray study of blood flow), CT, blood studies, and other tests as needed.
- Treatment is aimed at maintaining heart, blood vessel, and lung functions as well as preventing clot recurrence.
- Hospital care is necessary. Supplemental oxygen will be provided, and drugs will be given through a vein (IV).
- Surgery may be necessary to tie off the big vein leading to the heart and lungs (vena cava) or to insert a filter to trap recurrent clots.
- Self-care steps (if advised by your health care provider). Wear elastic or compressive stockings or leg wraps with elastic bandages. Don't sit with your legs or ankles crossed. Elevate your feet higher than your hips if sitting for long periods. Raise the foot of your bed.

MEDICATIONS

- Anticoagulant drugs to treat the clots will be prescribed. You may need indefinite treatment with these drugs to prevent a recurrence. Your health care provider will explain their risks and benefits.
- Clot-dissolving (clot buster) drugs may be prescribed. They break down the blood clots.
- Drugs to treat other disorders may be prescribed.

ACTIVITY

Rest in bed until all symptoms of the clot improve. While in bed, move your legs often.

DIET

No special diet. Drink plenty of fluids.



NOTIFY OUR OFFICE IF

- You or a family member has symptoms of pulmonary embolism. This is an emergency! Call 911.
- The following occur during treatment: Chest pain or coughing up blood, shortness of breath, or increased swelling and pain in the leg.

Special notes:

More notes on the back of this page