

DISEASE / PATHOLOGY

- A clot blocks blood flow in the pulmonary arteries.
- Primary process: ventilation-perfusion mismatch causes hypoxemia and right-heart strain.
- Why it matters: a large PE can cause shock and sudden death.

RISK FACTORS

- Who is most at risk? Postop, immobile, cancer, pregnancy, prior DVT/PE.
- History / exposure: long travel, estrogen therapy, smoking, obesity.
- Genetics / lifestyle: inherited clotting disorders increase risk.

SIGNS AND SYMPTOMS

- *Hallmark findings:* sudden dyspnea, pleuritic chest pain, tachycardia.
- Early: anxiety, tachypnea, low SpO₂, cough or hemoptysis.
- Late / urgent: syncope, hypotension, cyanosis, severe distress.

DIAGNOSTIC TESTING

- *Tests, labs, imaging, procedures:* CT pulmonary angiography, D-dimer, ECG, ABGs, pulse oximetry, Doppler for DVT.
- Gold standard: CT pulmonary angiography in most settings.
- What confirms it: imaging evidence of embolus with compatible symptoms.

TREATMENT

- First-line: assess airway, oxygenation, and circulation first; give oxygen and continuous monitoring.
- Anticoagulants are first-line; thrombolytics or embolectomy may be used if unstable.
- Nursing considerations: monitor bleeding, hemodynamics, and respiratory status.
- Nursing need-to-know: sudden dyspnea after immobility is a major red flag.
- Nursing need-to-know: hold pressure longer after invasive procedures when anticoagulated.

PATIENT EDUCATION

- Home care: take anticoagulants exactly as prescribed and keep follow-up lab visits.
- Use mobility and DVT prevention strategies.
- When to *call*: bleeding, chest pain, or worsening *shortness of breath*.

ADDITIONAL NOTES:

- NCLEX must know: ABCs and hemodynamic stability come first.
- Red flag: hypotension may indicate massive PE.
- Common exam trap: PE can mimic anxiety but unexplained dyspnea is urgent.
- Priority action: support oxygenation and notify provider immediately.