

New Approaches to the Diagnosis of Pulmonary Embolism: Review Questions

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These questions are based on the cover article, "New Approaches to the Diagnosis of Pulmonary Embolism," which begins on page 23 of this issue. Choose the single best answer for each question.

- Risk factors for pulmonary embolism (PE) include all of the following EXCEPT:**
 - Lung cancer
 - Protein C deficiency
 - Recent hip replacement surgery
 - Female gender
 - History of prior PE
- Which of the following statements that refer to the Prospective Investigation of Pulmonary Embolism Diagnosis (PIOPED) study is FALSE?**
 - A high probability ventilation-perfusion (V/Q) scan with a high clinical suspicion is associated with a 75% probability of PE.
 - A low probability V/Q scan with a high clinical suspicion is associated with a 40% probability of PE.
 - An intermediate probability V/Q scan is associated with a 16% change of PE if clinical suspicion is very low.
 - The results of the V/Q scan should be interpreted in the context of clinical suspicion to best determine the risk of PE.
- All of the following are advantages of computed tomography (CT) in the diagnosis of PE EXCEPT:**
 - Visualization of mediastinal and chest wall abnormalities
 - High sensitivity for proximal PE
 - Provision of information about the lung parenchyma, pleurae, and pericardium
 - Requirement of radiologists who are well trained in the interpretation of scans
- Which of the following statements is TRUE regarding magnetic resonance imaging (MRI) in the diagnosis of PE?**
 - Intravenous contrast is needed in MRI.
 - The lower extremities cannot be imaged simultaneously by MRI.
 - The specificity of MRI for the diagnosis of PE has been reported to be 95% to 100%.
 - Obese patients can easily be imaged with MRI.
- Which of the following statements is FALSE regarding the diagnostic algorithm for suspected PE?**
 - V/Q scanning remains a reasonable initial diagnostic study.
 - Additional data is needed to define the role of spiral CT and MRI in the initial diagnosis of PE.
 - There is no role for lower extremity ultrasonography in the evaluation of patients with suspected PE.
 - If the V/Q scan is indeterminate and a patient is hypotensive, pulmonary angiography should be pursued.

For answers, see page 72

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Answers to the review questions asked on page 54.

1. (D) Female gender
2. (A) FALSE: A high probability ventilation-perfusion (V/Q) scan with a high clinical suspicion is associated with a 75% probability of PE.
3. (D) Requirement of radiologists who are well trained in the interpretation of scans.
4. (C) The specificity of MRI for the diagnosis of PE has been reported to be 95% to 100%.
5. (C) FALSE: There is no role for lower extremity ultrasonography in the evaluation of patients with suspected PE.

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