

Pulmonary embolic disease

- The CXR in acute pulmonary embolus (PE) is often normal and its main value is in identifying other possible causes for the symptoms thought to be due to a PE.
- A CXR is required to accurately interpret a ventilation/perfusion scan if this is to be used to diagnose a PE.
- Some signs on the CXR that may indicate a PE are peripheral wedge-shaped opacities representing infarcted sub-segmental areas of lung that may cavitate (Fig 13.1), pleural effusion, atelectasis and paucity of vascular markings in the region of the PE.

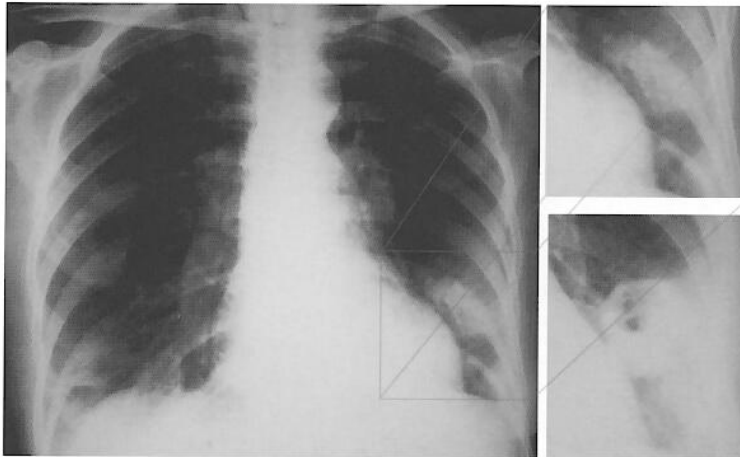


Figure 13.1

Frontal CXR of an adult male patient with a left lower lobe pulmonary infarct that subsequently cavitated (lower inset taken from CXR 3 weeks later).

- Chronic pulmonary embolic disease results from multiple small emboli to the lungs over a long period of time manifest in a gradual deterioration of pulmonary function.
- The signs associated with an acute PE are not a feature, but the development of pulmonary arterial hypertension may be evident with prominent proximal pulmonary arteries (Fig 13.2).

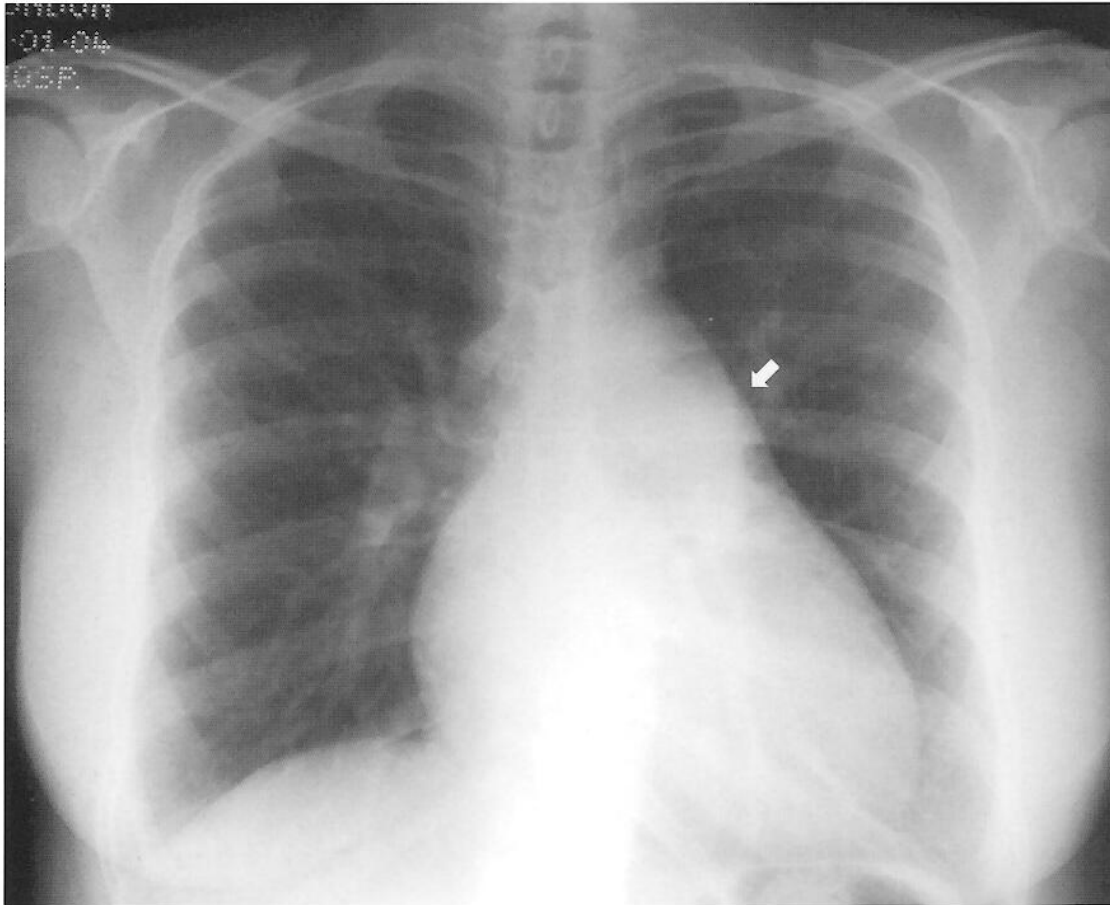


Figure 13.2

Frontal CXR of an adult male with pulmonary hypertension. Note the dilated pulmonary outflow tract causing an abnormal left mediastinal border (white arrow).