

Westermark sign and suspicion pulmonary thromboembolism

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Radiographic abnormalities in patients with pulmonary thromboembolic disease are frequent but very unspecific. Many signs may be observed which, although not diagnostic, may lead to the suspicion of such a picture.

One of these is the Westermark sign which is due to distal focal oligohaemia by thrombosis of a distal segmentary pulmonary artery and is manifested as an augmentation of clarity in the pulmonary parenchyma on chest x-ray.

We present the case of a 91-year-old male who

came to the emergency department with a syncopal picture and paroxystic dyspnoea. Radiological suspicion because of right basal Westermark sign and elevation of the corresponding hemidiaphragm (Figure 1) was later confirmed by emergency chest angio-CT (Figure 2) in which multiple repletion defects compatible with thrombi were detected at the most distal end of the right pulmonary artery as well as multiple lobular and segmentary branches of both hemithorax (images not demonstrated).



Figure 1. Right basal Westermark sign (hyperclarity of the pulmonary parenchyma) with elevation of the ipsilateral diaphragm.

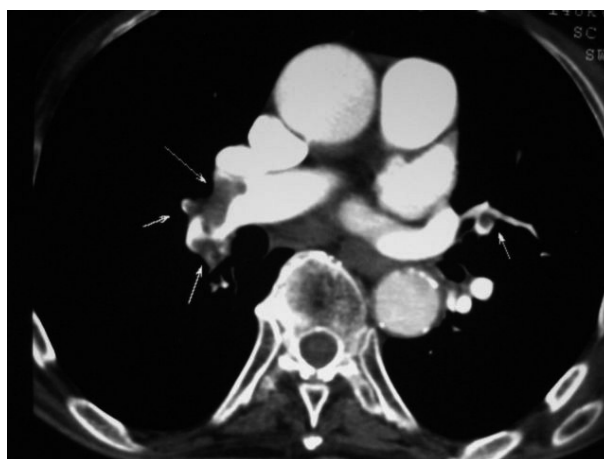


Figure 2. Bilateral thromboembolism with significant diminishment of the lumen of the right pulmonary artery in the most distal end by the presence of thrombi (arrows).

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