

Pulmonary Embolism and Stanford Type B Aortic Dissection in the Same Patient

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Rec Date: Oct 19, 2015; Acc Date: Oct 26, 2015; Pub Date: Oct 30, 2015

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Case Report

An 86-year-old female with a history of hypertension for more than 40 years was admitted to our hospital complaining of sudden chest pain 12 hours ago. Physical examination showed no abnormality but mild swelling of the right lower extremity. However, contrast-enhanced Computed Tomography Angiogram (CTA) demonstrated a Stanford

type B Aortic Dissection (AD), bilateral pleural effusion, and Pulmonary Embolism (PE) in the left lower pulmonary artery, right pulmonary artery trunk (Figure 1). Meanwhile, Colored-Doppler Ultrasound confirmed the Deep Vein Thrombosis (DVT) in the right popliteal vein.

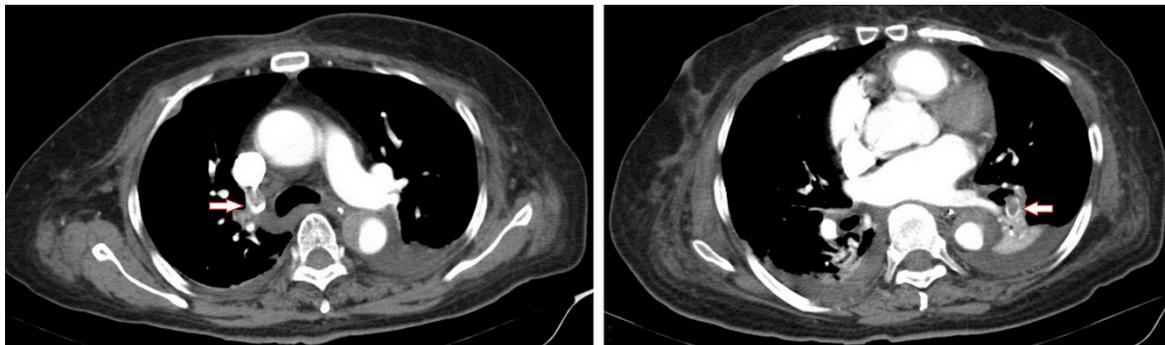


Figure 1: The transverse CTA images manifest the thrombi in the left lower pulmonary artery and the right pulmonary artery trunk (horizontal arrows).

The patient underwent insertion of an inferior vena cava filter for prevention of further PE. At the same time, conservative therapy was taken for the type B AD. However, she still complained about aggravated chest pain, so another CTA was arranged which showed increased pleural effusion 5 days later (Figure 2). Therefore Thoracic Endovascular Aortic Repair (TEVAR) was performed and a 36 mm ×

36 mm × 200 mm stent-graft was implanted. The result was satisfying and the patient had a smooth recovery with no major adverse events.

PE and Stanford type B AD causing chest pain in the same patient is rare with limited cases reported [1,2]. CTA scanning is a valuable clinical tool for diagnosis.

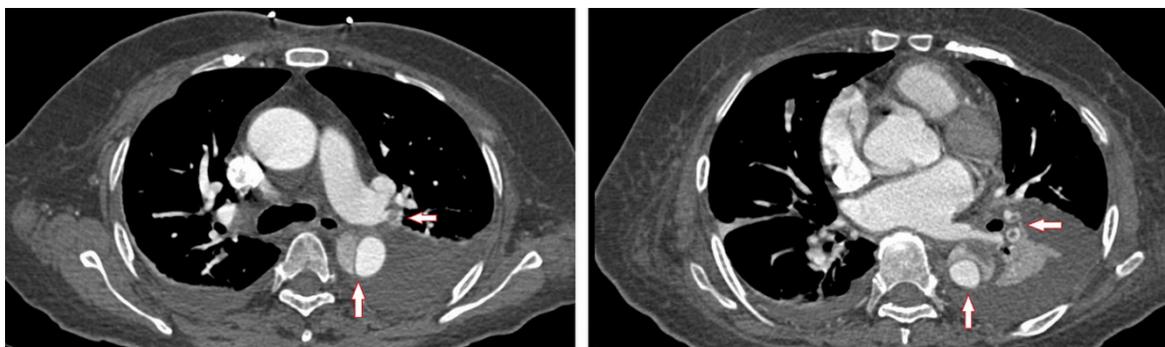


Figure 2: CTA 5 days later shows increased pleural effusion; true lumen; false lumen; internal flap of the descending aorta (vertical arrows). Thrombi can still be seen in the left lower pulmonary arteries (horizontal arrows)

References

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