

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

Dong Zhe Chai, Hua Yi Zhang* and Fan Zhang

Department of Vascular Surgery, The Second Affiliated Hospital of Jiaxing Medical College, PR China

*Corresponding author: Hua Yi Zhang, Department of Vascular Surgery, The Second Affiliated Hospital of Jiaxing Medical College, No. 1518, North Huancheng Road, Jiaxing, Zhejiang, PR China, Tel: +86-0573-82080930; Fax: +86-0573-82059702; E-mail: aegis1127@126.com

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

Copyright: © 2013 Chai DZ, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

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.

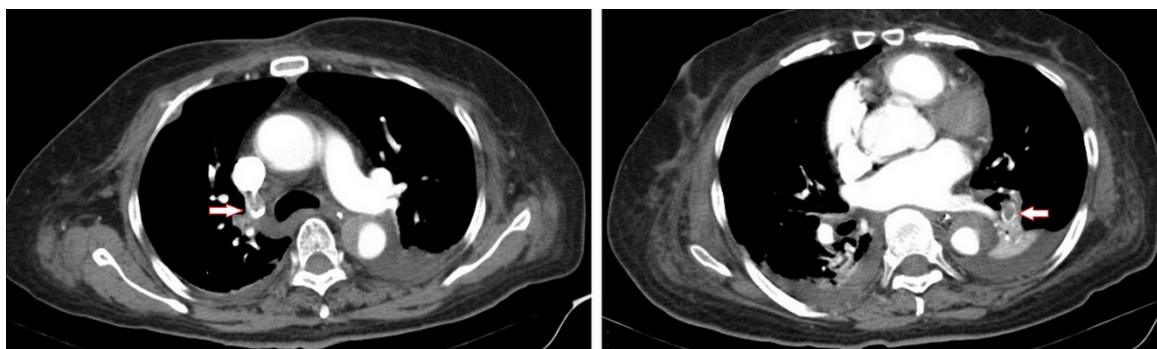


Figure 1: The transverse CTA images manifest the thrombi in the left lower pulmonary artery and the right pulmonary artery trunk (horizontal arrows).

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.

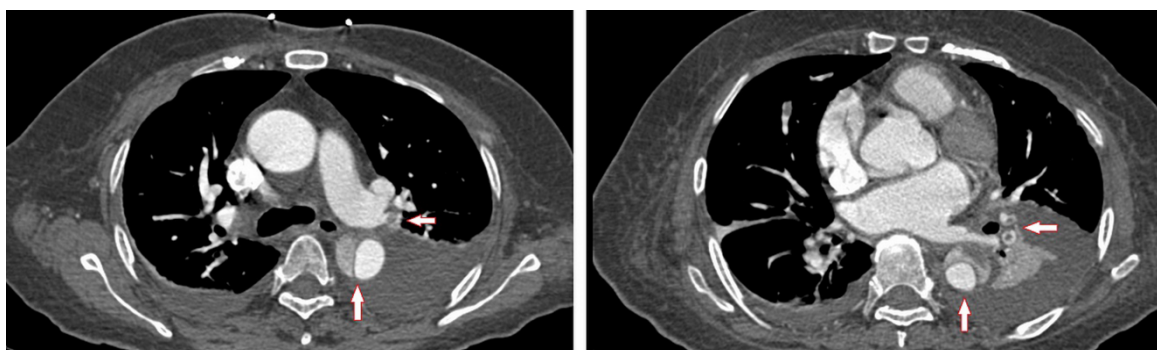


Figure 2: CTA 5 days later shows increased pleural effusion; true lumen; false lumen; internal flap of the descending aorta (vertical arrows). Thrombi can still be seen in the left lower pulmonary arteries (horizontal arrows)

References

1. Elmali M, Gulel O, Bahcivan M (2008) Coexistence of pulmonary embolism, aortic dissection, and persistent left superior vena cava in the same patient. J Cardiovasc Med 9: 1180-1181.
2. Morimoto S, Izumi T, Sakurai T, Komukai K, Kawai M, et al. (2007) Pulmonary embolism and deep vein thrombosis complicating acute aortic dissection during medical treatment. Intern Med 46: 477-480.