

Subocclusive pulmonary embolism in a young patient: Apropos of a case

Tromboembolismo pulmonar suboclusivo en paciente joven a propósito de un caso

Mario E. Nápoles Lizano¹✉, MD; José I. Ramírez Gómez², MD; and Rafael Ibáñez Azán³, MD

¹Department of Cardiac Tomography, *Hospital Universitario Cardiocentro Ernesto Guevara*. Santa Clara, Villa Clara, Cuba.

²Department of Cardiology, *Hospital Provincial Universitario Arnaldo Milián Castro*. Santa Clara, Villa Clara, Cuba.

³Department of Imaging, *Hospital Provincial Universitario Arnaldo Milián Castro*. Santa Clara, Villa Clara, Cuba.

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Pulmonary embolism (PE) is the cause of frequent visits to the emergency services –although several times it goes unnoticed– and represents the third leading cause of cardiovascular death. Its clinical picture is variable, depending on the location at the level of the pulmonary vascular tree, but in the most severe cases, hypoxemia and right heart failure predominate, which, secondarily, becomes biventricular. Its in-hospital mortality rate in patients with hemodynamic instability is around 30%. There may also be recurrence, despite proper anticoagulation, and it may be the cause of chronic embolism and pulmonary hypertension. We present the case of a 36-year-old man with a history of high blood pressure and smoking habit, who presented with diffuse chest pain and severe dyspnea. The echocardiogram

showed signs of right ventricular dysfunction and pulmonary hypertension, as well as free thrombus in the right atrium, for which a cardiac and pulmonary angiography was indicated, which showed a bilateral subocclusive PE with the presence of thrombus in the two main branches of the pulmonary artery (**Figure 1**) and perihilar pulmonary infarctions in both fields (**Figure 2**). The most striking thing about this case, in addition to the magnitude of the embolic disease, is its presence in a young patient with no apparent risk factors. The diagnosis of this disease requires a high degree of suspicion, but the clinical diagnosis is difficult, reason why imaging methods are of paramount importance. Tomographic techniques, with their rapid development, have guaranteed the acquisition of images quickly, safely and with enough quality to facilitate a diagnosis of heart and vascular diseases. Its usefulness in the emergency departments is undeniable, and it has been demonstrated by multiple studies worldwide, which recommend its use to rule out the three most frequent causes of chest pain and attendance to these departments: acute myocardial infarction, aortic dissection and pulmonary embolism.

✉ ME Nápoles Lizano
Cardiocentro Ernesto Che Guevara
Calle Cuba N° 610 e/ Barcelona y Capitán Velasco
Santa Clara, CP 50200. Villa Clara, Cuba.
E-mail address: marioenapoles@gmail.com

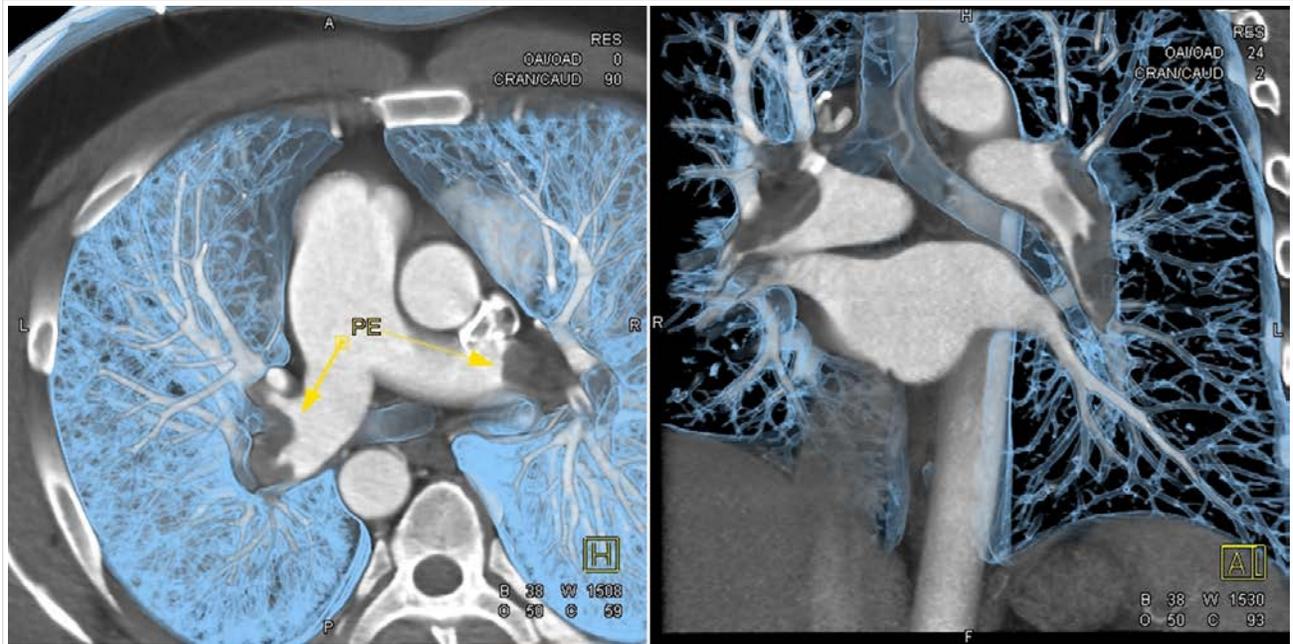


Figure 1.

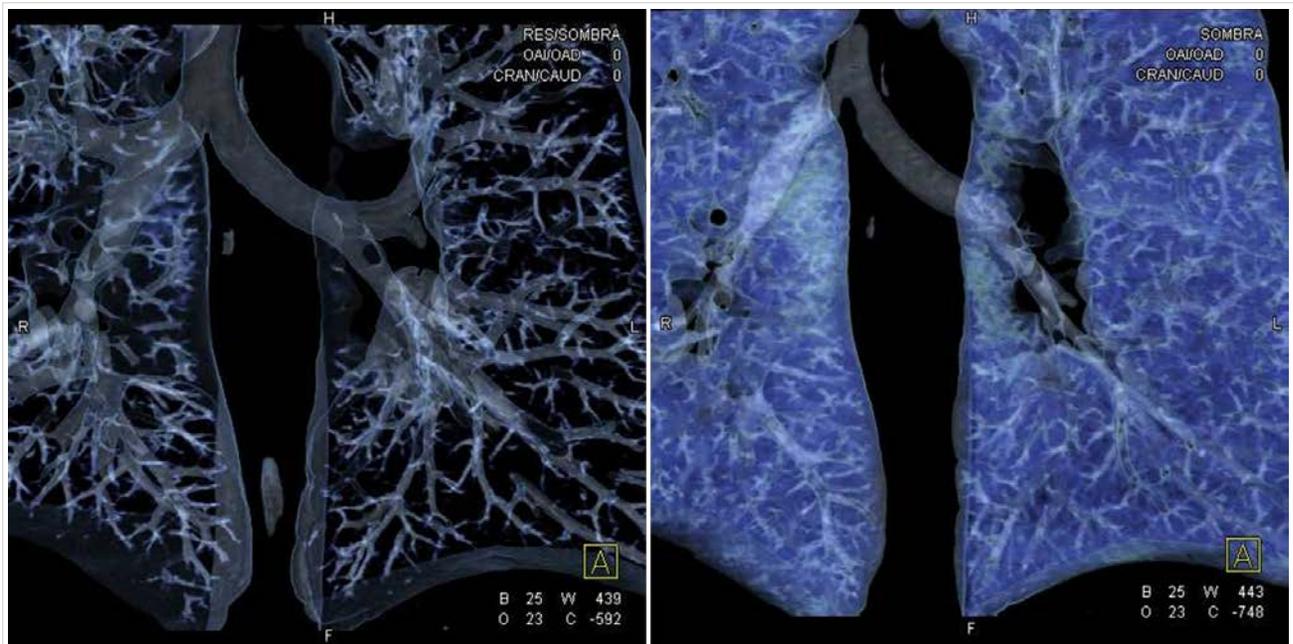


Figure 2.