

Clinical Image

Right Atrial Mass and Pulmonary Embolism: Thrombus-in-Transit or Myxoma? ☆



Masa en aurícula derecha y embolismo pulmonar: ¿trombo en tránsito o mixoma?

Luis Gorospe Sarasúa,<sup>a,\*</sup> Ana María Ayala-Carbonero,<sup>a</sup> Rosa Mariela Mirambeaux-Villalona<sup>b</sup>

<sup>a</sup> Servicio de Radiodiagnóstico, Hospital Universitario Ramón y Cajal, Madrid, Spain

<sup>b</sup> Servicio de Neumología, Hospital Universitario Ramón y Cajal, Madrid, Spain

A 51-year-old patient with a history of acute coronary syndrome treated with a stent 8 years earlier attended the emergency department with a complaint of chest pain. Chest X-ray showed condensation in the periphery of the right lung (Fig. 1A). A

chest computed tomography (CT) scan detected a filling defect in the right atrium (RA) and another in the intermediate artery (Fig. 1B–D). A subpleural pulmonary opacity of the right lung was interpreted as a small pulmonary infarction. Transthoracic echocardiography confirmed a 35 mm moving mass in the RA with two implantation sites. A diagnosis of myxoma or thrombus-in-transit in the RA complicated by pulmonary embolism was suggested and, given the high risk of massive pulmonary embolism, an urgent surgical intervention was performed that finally revealed a soft right atrial thrombus.

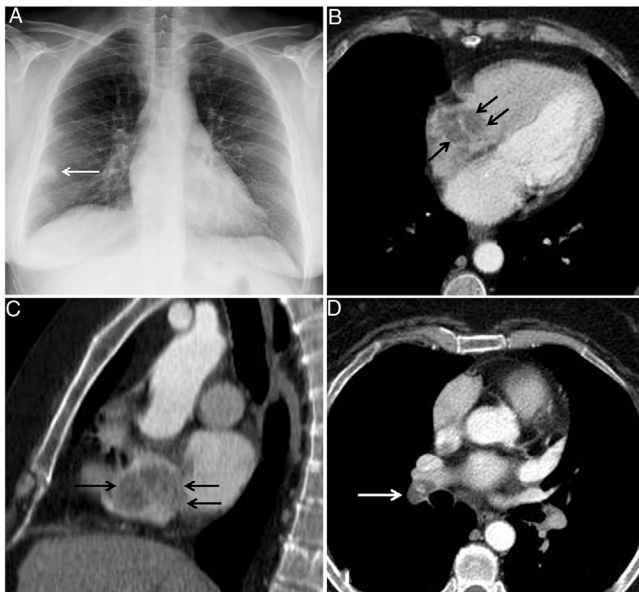
Cardiac thrombi particularly affect the left atrium, although they have also been described in the RA where they usually correspond to thrombi-in-transit and are accompanied by a high mortality rate. Myxomas are the most common primary cardiac tumors and 80%–90% affect the left atrium. RA myxomas can simulate a thrombus-in-transit, embolize the pulmonary arteries, and cause pulmonary infarctions. An RA thrombus-in-transit can simulate a cardiac myxoma in imaging techniques.<sup>1</sup>

**Conflict of Interests**

The authors state that they have no conflict of interests.

**Reference**

1. Scheffel H, Baumüller S, Stolzmann P, Leschka S, Plass A, Alkadhi H, et al. Atrial myxomas and thrombi: comparison of imaging features on CT. *AJR Am J Roentgenol.* 2009;192:639–45.



**Fig. 1.** (A) Posterior anterior chest X-ray showing condensation in the periphery of the right lung, corresponding to a pulmonary infarction (arrow). (B, C) Axial (B) and sagittal (C) chest CT images showing a mass in the right atrium (arrows). (D) Axial CT image of the chest in which a filling defect is seen in the intermediate artery (arrow).

☆ Please cite this article as: Gorospe Sarasúa L, Ayala-Carbonero AM, Mirambeaux-Villalona RM. Masa en aurícula derecha y embolismo pulmonar: ¿trombo en tránsito o mixoma? *Arch Bronconeumol.* 2021;57:435.

\* Corresponding author.

E-mail address: [luisgorospe@yahoo.com](mailto:luisgorospe@yahoo.com) (L. Gorospe Sarasúa).