## Image in cardiology

## Multiple Intracardiac Thrombi Complicated by Pulmonary Embolism



## Trombos intracardiacos múltiples complicados por embolia pulmonar

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Figure 1.

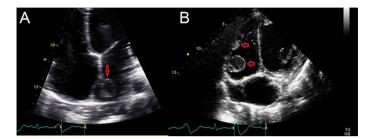


Figure 2.



Figure 3.

In January 2014, a 22-year-old woman with a known diagnosis of peripartum dilated cardiomyopathy presented to the emergency department with a 3-week history of dyspnea and orthopnea. The symptoms had worsened in the previous night. The initial evaluation included an echocardiogram showing thrombi in the left ventricular (Figure 1, stripes), left atrial (Figure 2A, arrow) and right ventricular (Figure 2B, arrows) chambers. The left atrial and one of the right ventricular images were less dense, suggesting recently formed thrombi. Pulmonary embolism was excluded by chest computed tomography angiography. During the admission, the patient was started on oral anticoagulation therapy with warfarin and was discharged in the therapeutic range (international normalized ratio [INR] = 2.6). One month after discharge, she was readmitted to the emergency department with hemoptysis. At that point, despite an INR of 2.1, a new chest computed tomography angiography demonstrated pulmonary embolism. The left atrial and right ventricular thrombi with recent thrombus characteristics reported in the previous echocardiography were not seen in a follow-up echocardiography (Figure 3, stripes show a smaller left ventricular thrombus and the arrow shows a smaller right ventricular thrombus).

Multi chamber intracardiac thrombi are rare. In our patient, the pulmonary embolism was probably caused by migration of the intracardiac thrombi to the pulmonary arteries. One particularity of this case was that even despite anticoagulation therapy, the patient developed a new episode of pulmonary embolism. The role of new oral anticoagulants in this situation is unknown. In addition to anticoagulation, we could mention surgical thrombectomy as an alternative treatment for intracardiac thrombosis. However, the optimal management in this scenario is unclear.

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