Sociedad Cubana de Cardiología

Cardiac Imaging

Intracardiac thrombus: an atypical presentation

Trombo intracardiaco: una presentación atípica

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A 60-year-old female patient presented to the emergency department with progressive chest pain and dyspnea of three months' duration. Physical examination revealed orthopneic posture, the presence of fine crackles in the lower halves of both lung fields, a blood pressure of 127/85 mmHg, and a heart rate of 102 beats per minute. According to the New York Heart Association (NYHA) classification, she was assessed as functional class III.

The baseline electrocardiogram revealed a complete left bundle branch block.

A two-dimensional transthoracic echocardiogram identified two thin-walled, fluctuating hypoechoic images adhered to akinetic areas of the left ventricle, which showed severe systolic dysfunction (FIGURE 1). These findings were interpreted as cystic thrombi, an atypical and early presentation of intracardiac thrombi.

Troponin I levels were 0.05 ng/mL and remained within normal values. Coronary angiography was not performed due to the patient's financial constraints.

In-hospital treatment included low-molecular-weight heparin, dual antiplatelet therapy with aspirin and clopidogrel, isosorbide dinitrate, high-dose atorvastatin, bisoprolol 5 mg daily, spironolactone, and sacubitril/valsartan.

The patient was discharged after six days of hospitalization with improvement in symptoms and a New York Heart Association (NYHA) functional class II. Heparin was replaced with rivaroxaban.

Monthly follow-up echocardiography (FIGURE 2) revealed a reduction in the size of the intracardiac masses, increased homogeneity, greater echogenicity, and decreased mobility, features consistent with the organization phase of intraventricular thrombi. Complete resolution of the thrombi was observed by the third month (FIGURE 3), accompanied by clinical stability and further improvement in functional status. However, at six months, the patient experienced sudden death due to a ventricular arrhythmia.

From an echocardiographic perspective, this presentation of intracardiac thrombi is uncommon. The cystic form, although rare, has been reported in patients with akinetic areas of the ventricular wall or true left ventricular aneurysms following large anterior myocardial infarctions.[1] Diagnosis relies on advanced imaging techniques, while systemic anticoagulation remains the cornerstone of treatment.[2]

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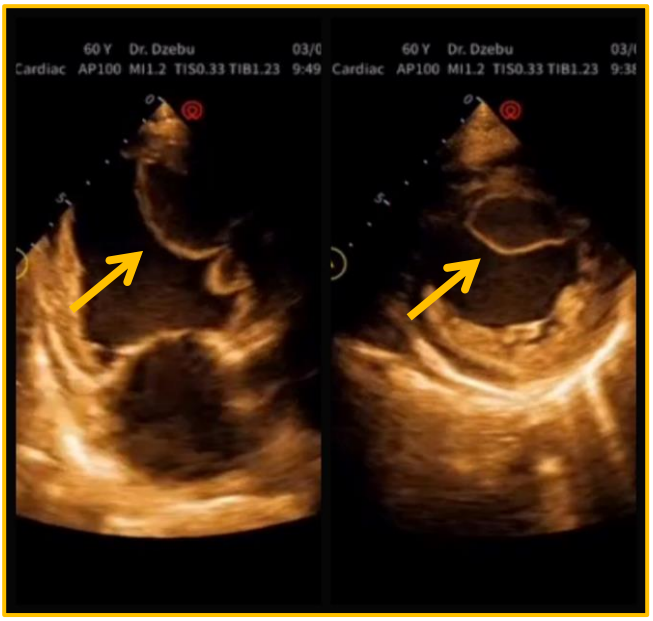

Figura 1- Echocardiogram performed at patient admission (arrow: thrombus)

Figura 2- Echocardiogram performed at the end of the first month of treatment

Figura 3- Echocardiogram performed on the third month of treatment