

Clinical Images**Cor Triatriatum as an Uncommon Cause of Recurrent Syncope**

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A 48-year-old woman with recurrent syncope presented with acute left vision loss after another syncopal fall. She reported no prodromal symptoms and no prior syncope work-up. Vital signs were normal. Ophthalmologic exam revealed left corneal ulcerations. Cardiopulmonary and neurologic examinations were unremarkable. Brain MRI, carotid ultrasound, serial troponins, telemetry, and EKG were normal. Transthoracic echocardiography uncovered a diagnosis of cor triatriatum, an obstructing patent membrane in a dilated, bisected left atrium (Fig. 1) with constricted blood flow and increased flow velocity across the restrictive orifice (Fig. 2).

Cor triatriatum represents only 0.1–0.4% of congenital cardiac malformations and has several anatomic variants.^{1,2} Ventricular inflow obstruction results from abnormal septation within the left or right atrium, creating two atrial chambers subdivided by a thin membrane. Many

remain asymptomatic until their thirties. Most cases in adulthood are discovered incidentally.^{3–5} Clinicians should suspect cor triatriatum in young healthy patients with clinical features mimicking mitral stenosis but no cardiovascular co-morbidities. Early and severe manifestations occur in smaller communicating orifices and higher obstruction between bisected atrial chambers.¹ Late symptoms results from progressive increase in pulmonary artery pressure.² Syncope, heart failure, and sudden cardiac arrest are well cited.^{5,6} Early diagnosis by echocardiography is important to expedite surgical cure.^{2,7,8}

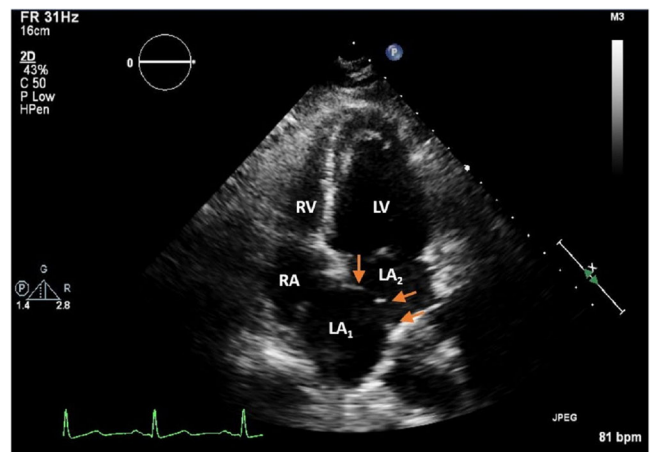


Fig. 1 Transthoracic echocardiographic image (apical 4-chamber view) displaying a thin, linear membrane (orange arrow), traversing and dividing the left atrium into two abnormal left atrial chambers (labeled as LA₁ proximally and LA₂ distally). LA left atrium, LV left ventricle, RA right atrium, RV right ventricle

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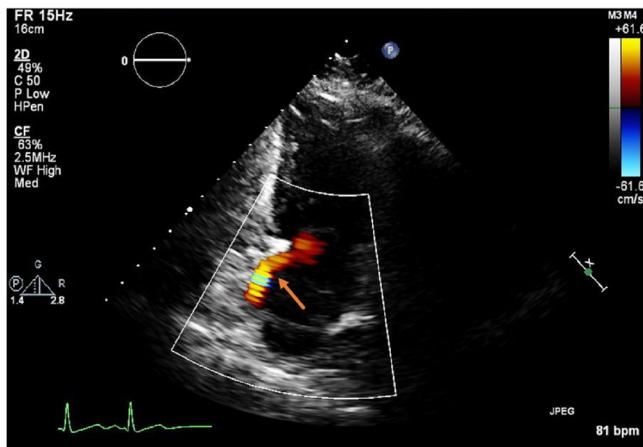


Fig. 2 Transthoracic echocardiographic image (apical 2-chamber view, color-flow Doppler mode) demonstrating constricted blood flow and increased flow velocity (orange arrow) across the restricted opening in the left atrium caused by the cor triatriatum

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Compliance with Ethical Standards:

Conflict of Interest: The authors declare that they do not have a conflict of interest.

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