

## **Late Presentation of Isolated Cor-Triatriatum Sinister: A Rare Case Report.**

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## **Clinical Presentation**

A 57 year-old-male patient with no known history of cardiac diseases. He presented with progressive exertional dyspnea (New York Heart association NYHA class 2-3), paroxysmal nocturnal dyspnea and lower limb edema over the past 6 months.

## **Imaging Findings**

The transthoracic echocardiogram demonstrated normal left and right ventricular size and systolic function, with a severely dilated left atrium (LA) containing a linear structure (red arrows) that divides LA into an upper (pulmonary venous) and a lower (vestibular) chambers (**Panel A**). A non-gated CTA (**Panel B**) revealed similar findings, and confirmed that all four pulmonary veins drain into the pulmonary venous chamber. Two- and three-dimensional transesophageal echocardiogram (**Panel C, D, E and F**) confirmed absence of intracardiac shunt the presence of a membrane dividing the LA into two chambers, with two fenestrations measuring 0.79 cm<sup>2</sup> and 0.99 cm<sup>2</sup>, respectively, allowing communication between the upper and lower LA chambers. These findings are diagnostic of cor-triatriatum sinister. The patient was referred for surgical correction.

## **Discussion Points:**

Cor-triatriatum sinister is an extremely rare condition and accounts for approximately 0.1% of congenital heart diseases. It is characterized by an atrial membrane that divides the LA into two compartments, leading to obstruction of blood flow. If the obstruction is significant, it can eventually cause symptoms resembling mitral stenosis. Patients with mild obstruction may experience delayed and intermittent symptoms due to the gradual calcification and fibrosis of the narrowed fenestration membrane. Here, we present a case report of late-onset symptomatic isolated cor-triatriatum sinister in a 57-year-old patient without any other associated cardiac abnormalities.

Figure 1:

