

## Revista Portuguesa de **Cardiologia**Portuguese Journal of **Cardiology**



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IMAGE IN CARDIOLOGY

## Double-chambered left ventricle in a patient with incomplete Shone complex



Ventrículo esquerdo de dupla câmara em doente com complexo de Shone incompleto

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Received 21 November 2021; accepted 30 December 2021 Available online 7 March 2023

A 70-year-old woman was assessed for progressive dyspnea in the previous month. She had a history of frequent respiratory tract infections during childhood and reduced exercise capacity throughout her life, attributed to bronchial asthma.

Physical examination revealed a III/VI diastolic murmur best heard at the apex, and a loud pulmonary second heart sound. Blood pressure was 115/65 mmHg, respiratory rate 20 breaths/min, heart rate 96 beats/min and room air oxygen saturation 96%.

Transthoracic and transesophageal echocardiography showed the presence of a double-chambered left ventricle of superior-inferior arrangement causing mid-cavity obstruction with a gradient of 39 mmHg (Figure 1A-C, Supplementary Video 1).

An incomplete Shone complex was demonstrated by the presence of (1) supravalvular mitral membrane (Figure 1D and E, Supplementary Video 2), (2) a parachute mitral valve (Figure 1D, arrowhead), (3) a bicuspid aortic valve (Figure 1F, asterisk) and (4) the exclusion of aortic coarctation. In addition, the mitral valve had a double lesion (severe regurgitation and mild stenosis), and the aortic valve had moderate regurgitation and mild stenosis (Supplementary Video 3).

Moderate anemia (hemoglobin 8.2 mg/dl) and a positive stool guaiac test led to an upper endoscopy revealing erosive gastritis with signs of recent bleeding. She was managed with proton pump inhibitors and blood transfusion, improving her clinical status. Surgical correction was offered according to the heart team's recommendation; however,

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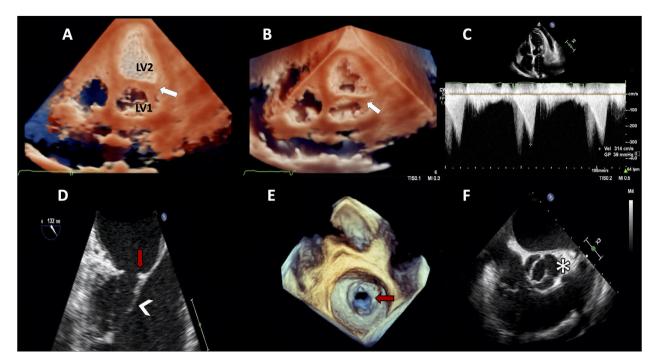


Figure 1 Transthoracic and transesophageal echocardiograms showing the presence of a double-chambered left ventricle; white arrow indicates the fibromuscular bundle separating the left ventricle into superior and inferior chambers (LV1 and LV2 respectively) (A-C); supravalvular mitral membrane (red arrow) (D and E); parachute mitral valve (D, arrowhead); and bicuspid aortic valve (F, asterisk).

the patient refused the procedure and continues with medical treatment.

## Conflicts of interest

The authors have no conflicts of interest to declare.

## Appendix A. Supplementary data

Supplementary material associated with this article can be found in the online version at doi:10.1016/j.repc.2021.12.018.