Giant Left Atrium Due to Severe Rheumatic Double Mitral Valve Dysfunction

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CASE PRESENTATION

A 59-year-old woman, active smoker, with permanent atrial fibrillation under oral anticoagulation and long-term diagnosed double mitral valve dysfunction secondary to rheumatic heart disease (RHD), was admitted to the emergency department due to refractory dyspnea at minimal exertion. Transthoracic echocardiography at rest revealed rheumatic severe double mitral dysfunction: mitral valve area - 0.79 cm²; maximum and medium transmitral gradient - 22 and 13 mmHg, respectively. There were also moderate aortic and mild tricuspid regurgitations and moderate pericardial and pleural effusion. The left atrium was markedly enlarged with an anteroposterior diameter of 128 mm and indexed volume of 1004 mL/m². (Figure 1 and Videos 1, 2 and 3) Left ventricular ejection fraction was 0.56 (Simpson's method) and the estimated systolic pulmonary pressure was 65 mmHg. A markedly large hyperechogenic sessile mass (729 x 798 mm) adhered to the lateral left atrial wall, suggestive of a massive thrombus, was also seen. (Figure 1 and Videos 1, 2 and 3) EUROSCORE II: 2.52% (high risk of mortality); Society of Thoracic Surgeons (STS) mortality score: 3.53%; STS morbidity or mortality score: 24.61%.

Despite being recommended by the experts as the default treatment, surgical mitral valve replacement combined with left atrial reduction was, for this patient, contraindicated by the heart team, due to those high risks. Notorious left atrial enlargement, like in this case, is strongly associated with RHD, especially when there is severe double mitral valve dysfunction.[1,2]

Keywords

Left Atrium; Echocardiography; Diagnosis.

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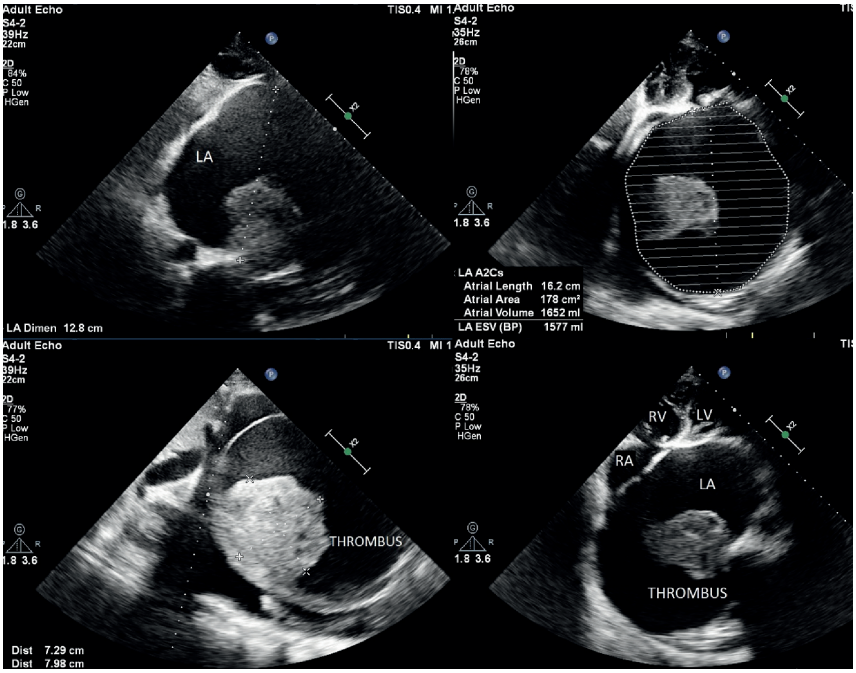
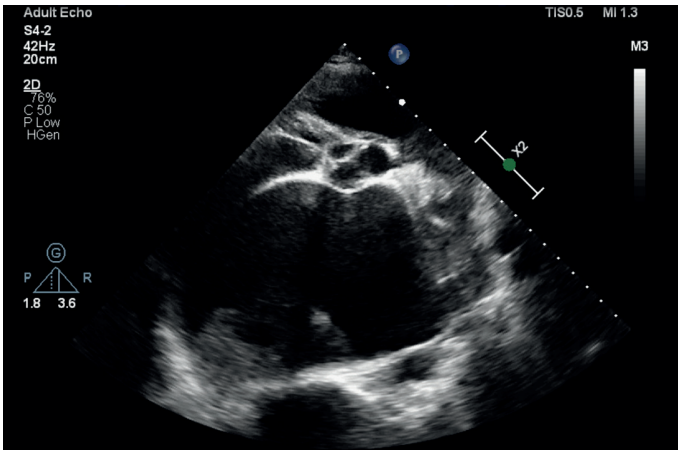
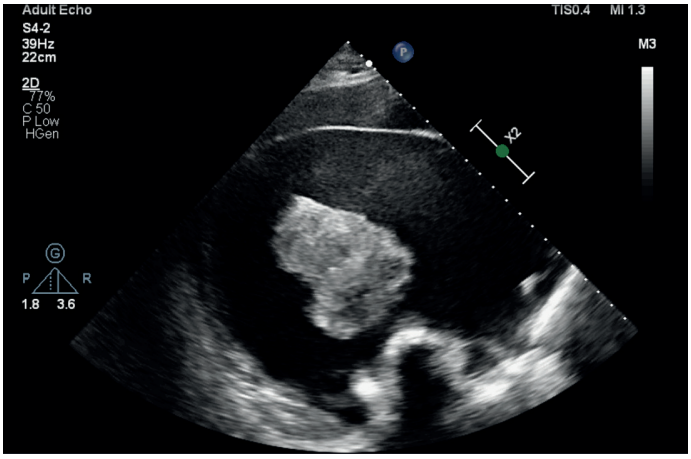


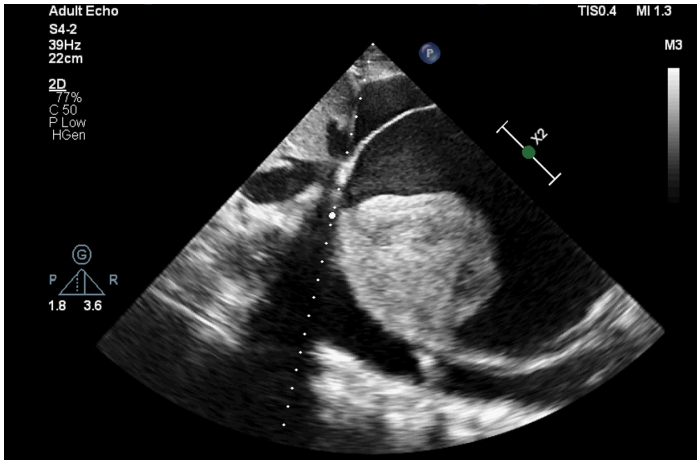
Figure 1 – *Giant left atrium with the massive thrombus adhered to its lateral wall. LA, left atrium; RA, right atrium; LV, left ventricle; RV, right ventricle.*



Video 1 – *Giant left atrium with massive thrombus adhered to its lateral wall. Short-axis view.*
Watch the video here: http://departamentos.cardiol.br/dic/publicacoes/revistadic/2019/v32_2/video_v32_2_atrio_esquerdo_ingles.asp



Video 2 – *Giant left atrium with massive thrombus. Subcostal view.*
Watch the video here: http://departamentos.cardiol.br/dic/publicacoes/revistadic/2019/v32_2/video_v32_2_atrio_esquerdo_ingles.asp



Video 3 – *Giant left atrium with massive thrombus adhered to its lateral wall. Subcostal view.*
Watch the video here: http://departamentos.cardiol.br/dic/publicacoes/revistadic/2019/v32_2/video_v32_2_atrio_esquerdo_ingles.asp

Authors' contributions

Conception and design of the study: Oliveira MDP, Sá GA. Acquisition of data: Oliveira MDP, Moleta DB, Miranda RS, Souza GCS, Sá GA. Analysis and interpretation of the data: Oliveira MDP, Sá GA. Writing the manuscript: Oliveira MDP, Sá GA. Critical revision of the manuscript for important intellectual content: Oliveira MDP, Sá GA.

Potential conflict of interest

The authors declare that there is no relevant conflict of interest.

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