A giant left atrium due to severe mitral stenosis

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Introduction: Giant left atrium is a rare condition, with a reported incidence of 0.3%, and following mainly rheumatic mitral valve disease with mitral regurgitation being more prominent than mitral stenosis¹. It is believed that chronic volume and pressure overload created by mitral valve disease, in addition to weakening of left atrial wall because of rheumatic pancarditis, is responsible for the excessive enlargement of the left atrium².

Case report: 62-year-old female patient presented complaining of dysphagia and dyspnea. She was diagnosed with severe mitral stenosis and mild regurgitation 10 years before admission to our hospital but refused cardiac surgery. Clinically, the patient had features of congestive cardiac failure. Chest X-ray revealed asymmetrical cardiomegaly with the right heart border extending to the right lateral chest wall. Echocardiography demonstrated giant left atrium with 11.2 x11.5 cm diameter and LAVI was 440 ml/m² (Figure 1). ECG revealed atrial fibrillation which is always present in giant left atrium. It was interesting that there was no formatted thrombus in the giant left atrium although the patient did not take recommended oral anticoagulation therapy. Patient also had cardiac cachexia and inappetence due to dysphagia due to esophageal compression. Patient again refused cardiac surgery treatment. She died 6 months after due to heart failure.

Conclusion: Nowadays, giant left atrium is rarely seen due to decreasing incidence of rheumatic heart disease. Dilatation of the left atrium in our case was the left atrial compensation mechanism due to the chronic pressure overload in mitral stenosis, to balance pulmonary capillary wedge pressure. To the best of our knowledge, this is the only case reported in the recent literature of the giant left atrium due to severe mitral stenosis and without formatted thrombus.

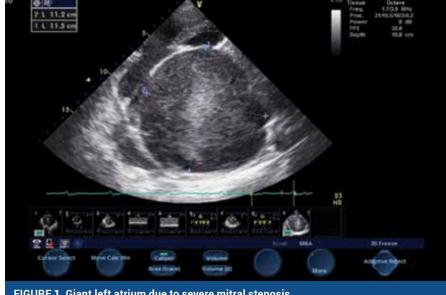


FIGURE 1. Giant left atrium due to severe mitral stenosis.

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