

Enlarged Right Atrium Falsely Interpreted as a Mediastinal Mass: A Case Report

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ABSTRACT

Right atrial dilation due to left heart disease is a common complication among adults. The present review aimed to describe a case of massively dilated right atrium in a female patient presenting with valvular heart disease and no atrial fibrillation. The results of chest X-ray revealed a large opacity filling the lower right hemithorax, falsely interpreted as a mediastinal mass. During the transesophageal echocardiography, severe enlargement of the right atrium was detected, and open mitral and tricuspid valve replacements were performed successfully.

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Image in Cardio-Thoracic Medicine

A 65-year-old woman with a history of easy fatigability was presented with recent onset of chest pain and palpitation. Additionally, the patient had a history of closed mitral valve commissurotomy (25 years ago).

The results of electrocardiography were indicative of normal sinus rhythm with T-wave inversions in leads II, III and aVF, as well as biphasic T waves in V1-2.

Chest X-ray of the patient revealed a large opacity filling the lower right hemithorax, falsely interpreted as a mediastinal mass (Figure 1). During the transesophageal echocardiography,

severe enlargement of the right atrium was detected (Figure 2). Moreover, moderate tricuspid stenosis with severe tricuspid regurgitation, right ventricular dysfunction and severe mitral stenosis with calcified leaflets were identified in the patient. Open mitral and tricuspid valve replacements were performed successfully, and the patient was discharged after two weeks under good conditions.

Learning Points:

- Right atrial dilation due to left heart disease is a common complication among adults.

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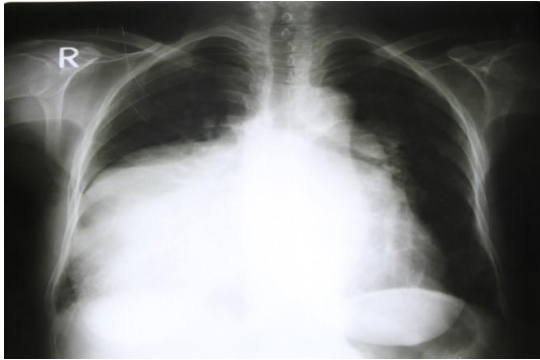


Figure 1. CXR Revealed Large Opacity in Lower Right Hemithorax due to Massive Dilation of Right Atrium (Falsely Interpreted as Mediastinal Mass)

- Therefore, it should be taken into account in the differential diagnosis of mediastinal masses.
- According to the literature, the most common causes of enlarged right atrium in adults are chronic pulmonary disease, tricuspid valvular stenosis, severe mitral valvular pathology with pulmonary hypertension, pulmonary embolism and infarction (1).
- Absence of atrial fibrillation in the described patient was noteworthy.

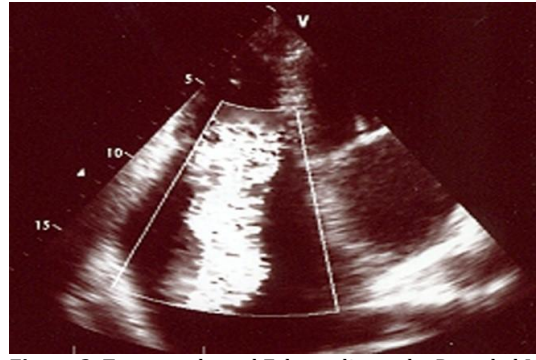


Figure 2. Transesophageal Echocardiography Revealed Large Atrium with Tricuspid Regurgitation

Conflicts of Interest

None declared.

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