

Left Atrium With Dysphagia:Case Report

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Case report

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Abstract

Background: Left atrium in 27 to 38 mm is normal and over 80mm is called giant left atria. Giant left atria is mostly caused by rheumatic mitral valve regurgitation. Pain, dysphagia and reflux are the common symptoms.

Case presentation: We report a case with dysphagia for the reason of rheumatic heart disease with left atrium enlargement. He also had difficulty swallowing, but never had an inability to eat. And further the inner diameter did not fit the standard of giant left atria, but there was obvious compressive symptom of the esophagus and severe stricture of the esophageal lumen.

Conclusions: There are many reasons for dysphagia, which need to be analyzed on a case-by-case basis. The patient with dysphagia after eating is likely to be confused with an esophageal foreign body, and a careful history should be taken.

Background

Left atrial hypertrophy as a reasons of dysphagia is rare(1), which can be little experience for learn in domestic and has been reported in abroad, but left atrial hypertrophy is not included in the reason of dysphagia(2). Mitral stenosis is a common type of rheumatic heart disease. The reduced activity of the mitral valve and limited opening result in valve orifice stenosis, and part of the blood will stay in the left atrium(3). After the left atrial compensatory hypertrophy disorder, the systolic force will decrease and then become highly dilated, so the typical manifestation is the obvious enlargement of the left atrium.

The dysphagia of left atrial hypertrophy is simply due to the compression of the esophagus caused by left atrial hypertrophy from the perspective of imaging. The left atrium produces pressure on the esophagus and the esophagus is pushed backward to the right the lumen is narrows. Even left atrium for esophageal pressure not to esophageal lumen narrowed for food cannot pass, but is likely to affect the normal swallowing of esophageal(4). Some foreign scholars also proposed that another cause of dysphagia and even inability to eat might be left atrial hypertrophy, which presses on the vagus nerve and causes the motor function of the esophagus to be impaired(5).

Case Presentation

A 76 - year - old man patient was admitted to our hospital for the complaint of dysphagia with a history of rheumatic heart disease. Patient had difficulty swallowing so that he's unable to eat solid and liquid. Echocardiographic shows that the inner diameter of the left atrium was 52mm (Fig. 1) (normal value < 38mm),(6) which was consistent with rheumatic heart disease, and mitral stenosis with a mild amount of regurgitation. Chest CT examination showed that the heart was abnormal in shape. The left atrium was significantly enlarged, and the esophagus was squeezed backwards, leading to the narrowing of the esophageal lumen. (Fig. 2) The reason for the enlarged left atrium is probably caused by rheumatic

disease with mitral stenosis and adaptive remodeling. The patient was transferred to the department of Cardiology for further treatment.

Discussion And Conclusions

Many factors can cause swallow, the most common of dysphagia is due to primary malignancy of the esophagus, especially in the elderly.(7) Dysphagia caused by large left atria is less common, which seriously affects the quality of patients' life. Surgery is usually performed through resection part of the enlarged inferior and/or superior wall of the left atrium. (8)

In this case, the inner diameter of the left atrium was 52mm. Although the inner diameter did not fit the standard of giant left atria, but there was obvious compressive symptom of the esophagus and severe stricture of the esophageal lumen. To our knowledge, this is the first case in which the left atrium less than 80mm in diameter and pressing on the esophagus made the patient unable to eat solid and liquid.

Declarations

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Authors' contributions

All authors were take part in the interpretation of the findings. Authors were read and approved the manuscript.

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Availability of data and materials

Data information is available from the corresponding author

Ethics approval and consent to participate

Ethics approval and consent to participate were obtained.

Consent for publication

All authors consent the publication.

Competing interests

No potential conflicts of interest

Footnotes

GLA=giant left atria

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Figures



Figure 1

Echocardiography: left atrial postero-anterior diameter = 52mm.

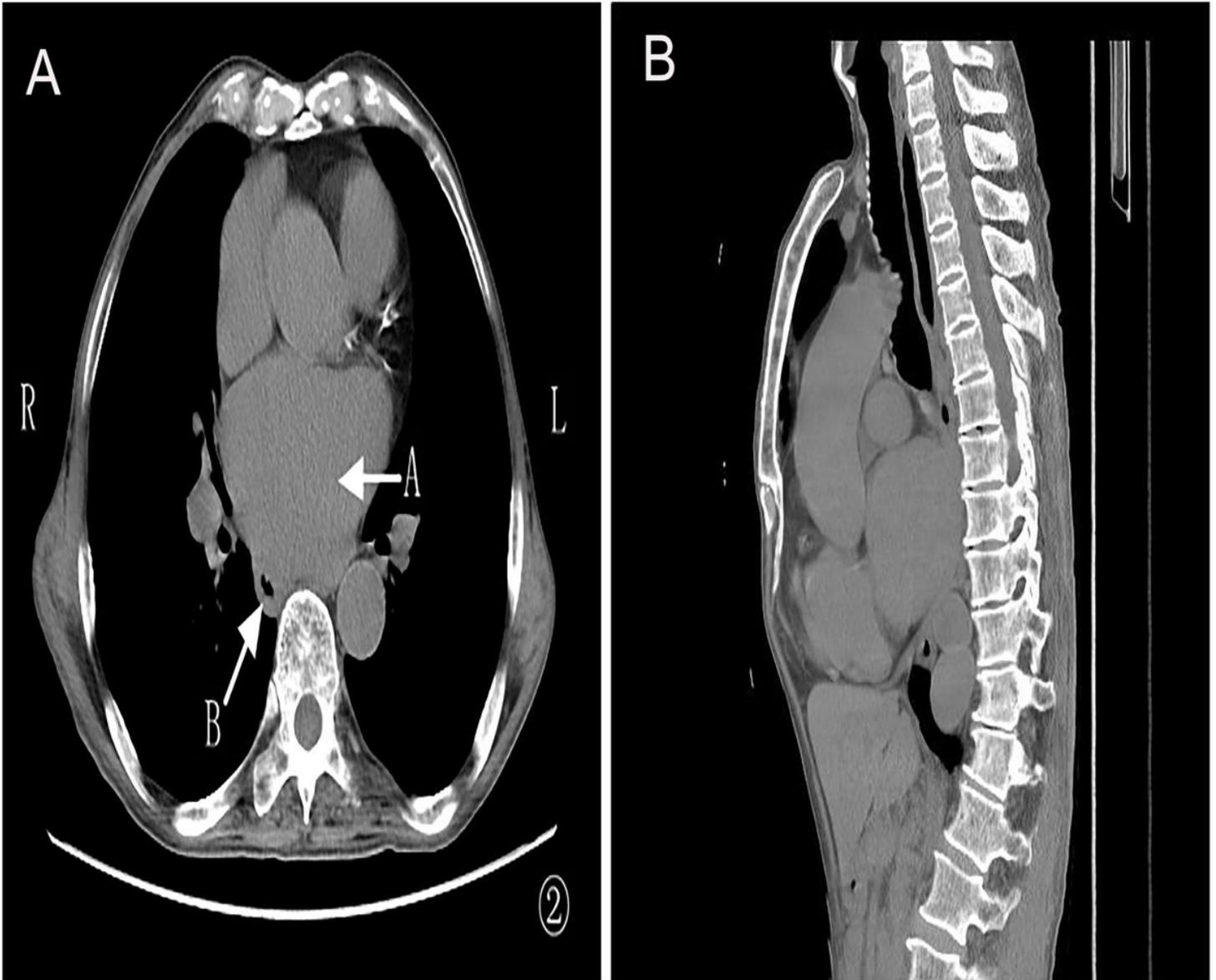


Figure 2

CT examination with left atrial is giant and the esophagus was clearly skewed to the right with a lumen was narrowed. a Coronary position. b Sagittal position.