

Left Atrial Septum Thrombus Masquerading as a Myxoma in a Patient with Aortic Stenosis in Sinus Rhythm

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A 77-year-old female underwent right and left heart catheterization, left ventriculography, and coronary arteriography for symptoms of severe exertional dyspnea with physical findings consistent with aortic stenosis. The electrocardiogram revealed normal sinus rhythm. The patient had no prior cardiac history, and in particular, no history of arrhythmia or arterial embolic events. At catheterization, the patient was found to have normal left ventricular systolic function but critical aortic stenosis with single vessel coronary artery disease. There was no mitral valve gradient, but the pulmonary capillary wedge pressure was 26 mmHg. Preoperative transthoracic echocardiography (TTE) confirmed critical aortic stenosis. The left atrium was mildly enlarged at 44 mm. Transesophageal echocardiography (TEE) was instituted during induction of anesthesia for intraoperative monitoring.

Before the patient was placed on cardiopulmonary bypass, a mobile mass attached to the left atrial (LA) side of the fossa ovalis was visualized first in the horizontal plane (Fig. 1) and then the vertical plane (Fig. 2). Based on the appearance by TEE, it was thought to be a myxoma, and then was surgically inspected and removed from the mid-portion of the fossa ovalis. Of note, there was no evidence of a patent foramen ovale either by TEE or by di-

rect visual inspection of the atrial septum. By TTE and TEE, the patient had no evidence of any mitral valve abnormality; in particular, there was no evidence of rheumatic valve disease. In addition, spontaneous echo contrast was not visualized within the LA. Histopathological evaluation revealed the mass to be organized thrombus without any evidence of myxoma or other tumor histology. Postoperatively, a hematological evaluation was unremarkable.

This atrial septal thrombus had TEE features usually associated with a myxoma. The mass was attached to the LA side of the fossa ovalis, had a heterogeneous appearance, and was mobile.¹ In contradistinction to this, LA thrombus is found most often within the left atrial appendage (LAA) and is associated frequently with atrial fibrillation or rheumatic mitral valve disease. Furthermore, thrombus within the LA or LAA is associated often with spontaneous echo contrast, a significantly enlarged LA, or a poor cardiac output. This patient had none of these. While certain features of a mass found within the LA may suggest its etiology, exceptions occur. Our case and a reported myxoma within the LAA² are exemplary of such exceptions.

References

1. Alam M, Sun I: Transesophageal echocardiographic evaluation of left atrial mass lesions. *J Am Soc Echocardiogr* 1991;4:323-330.
2. Roldan FJ, Vargas-Barron J, Espinola-Zavaleta N, et al: Recurrent myxoma implanted in the left atrial appendage. *Echocardiogr* 2000;17:169-171.

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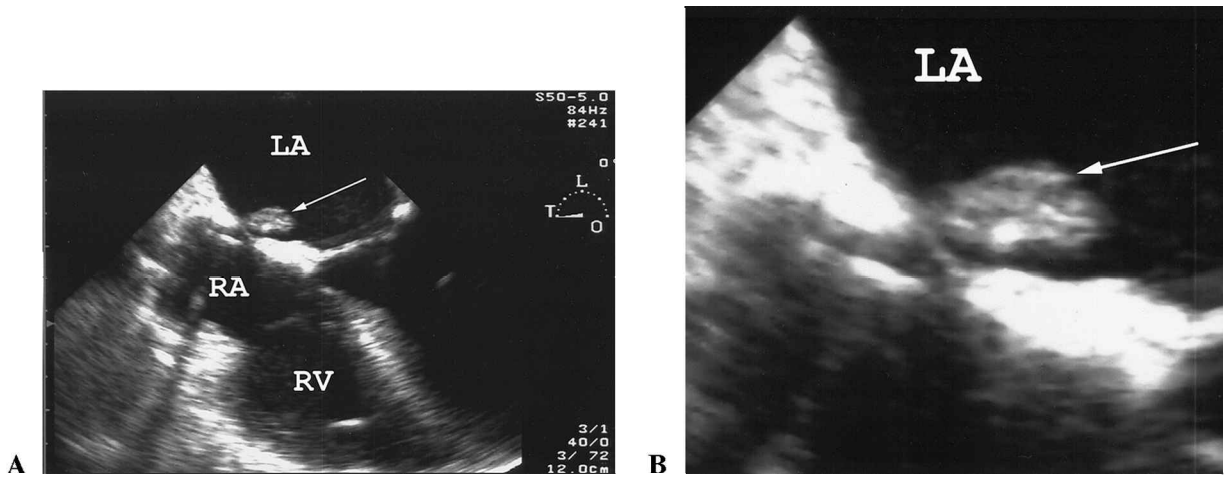


Figure 1. A. TEE image in the horizontal plane demonstrating a mobile mass attached to the left atrial side of the interatrial septum. B. Close-up image suggests a heterogeneous appearance of the atrial septal mass. TEE = transesophageal echocardiography.

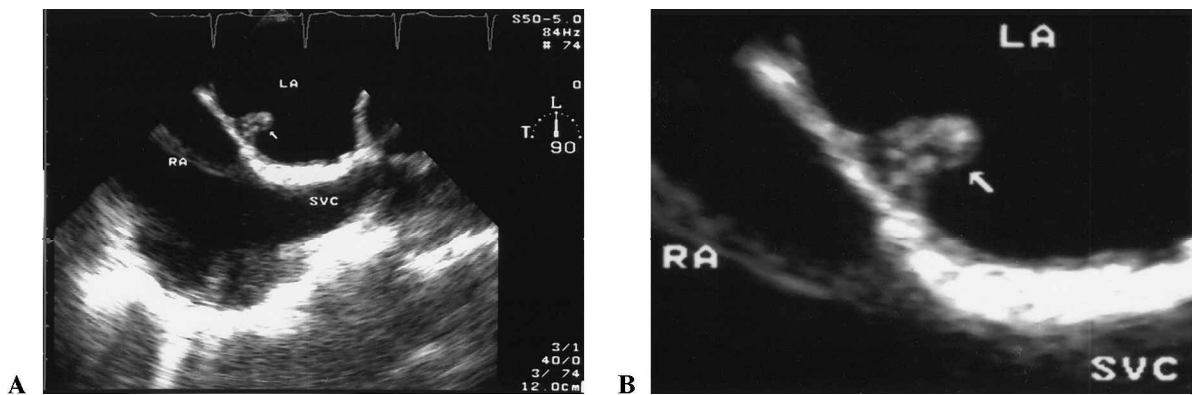


Figure 2. A. TEE image in the vertical plane again demonstrates the mass attached to the mid-portion of the left atrial side of the fossa ovalis. B. Close-up image again suggests a heterogeneous appearance of the mass. TEE = transesophageal echocardiography.