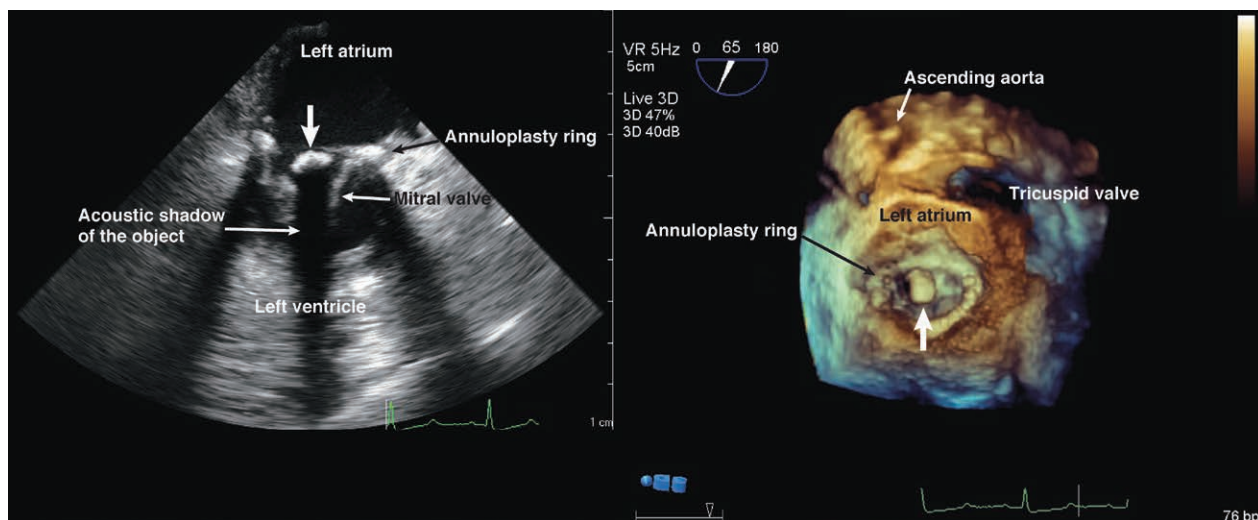


A Floating Object in the Left Atrium

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INTRAOPERATIVE, real-time, three-dimensional transesophageal echocardiography (RT 3D TEE) has become common in addition to conventional two-dimensional (2D) TEE. However, an efficient application of RT 3D TEE to cardiac surgery is still evolving.¹ The images were obtained from a 36-yr-old woman with Marfan syndrome during aortic root replacement and mitral valve plasty immediately after aortic unclamping. 2D TEE detected a floating object with acoustic shadow above the mitral valve in the left atrium (arrow, midesophageal mitral commissural view; left).

Because RT 3D TEE revealed that the object was rectangular-shaped and about 6 mm per side (arrow, en-face view of mitral valve; right), it was suspected to be a pledget used as a suspended suture. A second pump run with cardioplegic arrest was performed to remove the object, and the floating object was confirmed to be a pledget.

In the present case, RT 3D TEE played a pivotal role in object identification and surgical decision-making. The 3D image was sufficient to convince the surgeons to remove the object. From this point of view, RT 3D TEE may have some advantages over conventional 2D TEE. First, spatial information from RT 3D TEE allows for easily identifying objects.² Second, RT 3D TEE facilitates sharing of findings among surgical team members because en-face views of structures obtained by 2D TEE are subject to each observer's perception.^{1,2} Given that information sharing is critical for team performance and patient safety in cardiac surgery,³ the role of RT 3D TEE is crucial for making appropriate clinical decisions.

Competing Interests

The authors declare no competing interests.

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