

A giant right atrial myxoma demonstrated by RT-3D transesophageal echocardiography and magnetic resonance imaging

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An 84 year-old woman was admitted to our hospital with a history of hypertension. She had no history of cardiac symptoms, syncope or fever, and her medical history was unremarkable. On admission, the patient's heart rate was regular and her blood pressure was high, 180/100 mm Hg. Blood biochemistry was revealed to be normal. The 12-lead electrocardiogram demonstrated atrial fi-

brillation rhythm and the chest X-ray was normal. Transthoracic echocardiography (TTE) revealed a 35 × 32 mm lobular mobile mass originating from the right atrial free wall. Although the mass had a relatively homogeneous structure, some parts of it had increased echogenicity, while other parts had an echolucent area, signs concordant with calcification and hemorrhage, respectively (Fig. 1). For



Figure 1. Transthoracic echocardiography showing a lobular mobile mass originating from the right atrium.

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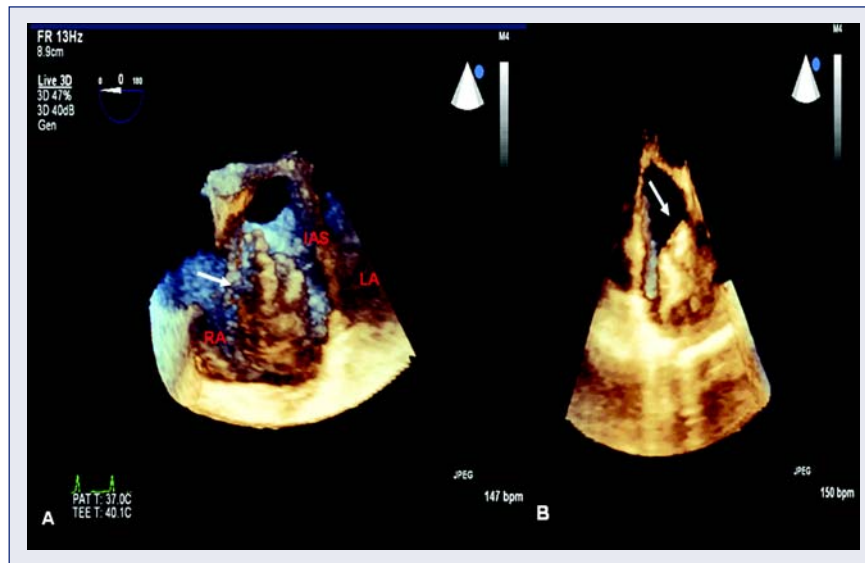


Figure 2A, B. Real-time three-dimensional transesophageal echocardiography showing a multilobular, homogeneously echogenic mass attached to the right atrial free wall with pedunculus (arrow); IAS — interatrial septum; LA — left atrium; RA — right atrium.

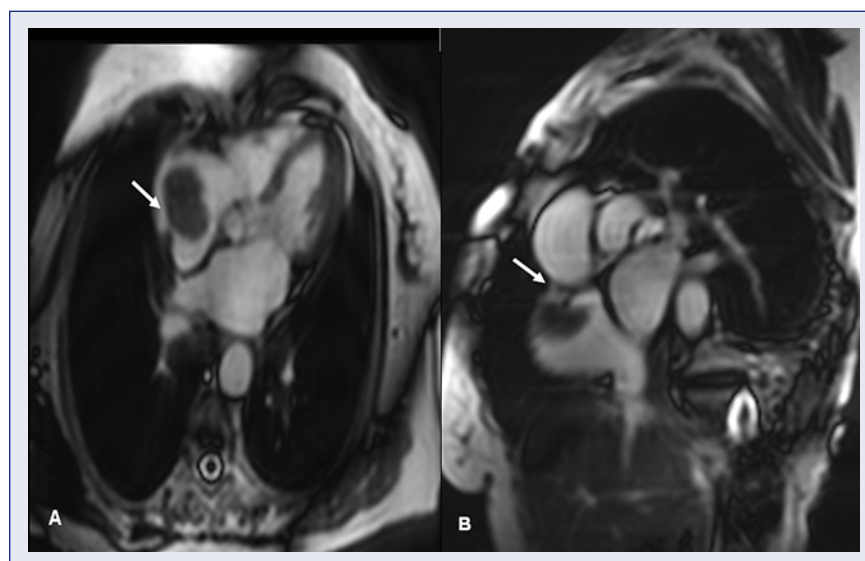


Figure 3A, B. Magnetic resonance imaging showing a mass attached to the right atrium with pedunculus (arrow).

better delineation of the mass and atria, we planned transesophageal echocardiography (TEE). Real-time three-dimensional (RT-3D) TEE showed a 38×31 mm multilobular, homogeneously echogenic mass attached to the right atrial free wall (Fig. 2A, B). These findings were confirmed by magnetic resonance imaging (MRI) (Fig. 3A, B). The patient underwent successful operation for right atrial mass which was diagnosed as myxoma pathologically. TTE is the basic diagnostic technique in

these circumstances, but RT-3D TEE and MRI may also be helpful in surgical planning and giving a better delineation of the mass. We present a case of right atrial myxoma demonstrated by advanced imaging techniques.

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