

Mobile left atrial round mass free floating in mitral regurgitation flow mimicking a whale spray

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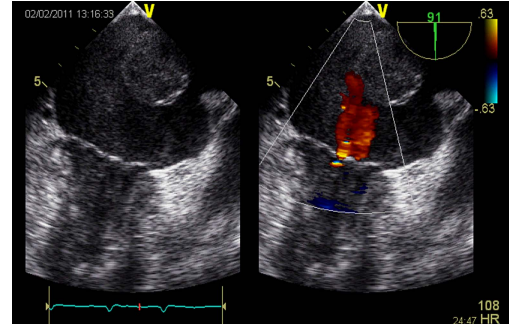
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DESCRIPTION

A 77-year-old man with a history of atrial fibrillation presented with bilateral loss of vision. A CT scan revealed acute cerebral infarction in the left occipital lobe. Cardiogenic embolic stroke was diagnosed. Treatment with intravenous heparin and antioxidative radical scavenger, edaravone and oral warfarin was started. Nevertheless, he developed new aphasia, right-sided paralysis and left conjugate deviation of the eyes 3 weeks later. MRI revealed a new cerebral infarction in his temporal lobe. He was admitted to our hospital for further investigation and treatment. The ejection fraction of the left ventricle was measured as 79% by transthoracic echocardiography and there was moderate mitral regurgitation. Transoesophageal echocardiography revealed the presence of a 28×38 mm round mass, possibly a thrombus in the left atrium, suggesting that embolisation was the cause of the stroke (figure 1A,B, arrows). The round mass was free floating in the mitral regurgitation flow, mimicking a whale spray above the mitral valve orifice without mural attachment (figure 1B, arrows, arrowhead and video 1). The patient received aggressive anticoagulation therapy, but did not undergo a surgical operation to remove the mobile mass because of a



Video 1 The round mass was floating in mitral regurgitation flow above the mitral valve orifice (mimicking a whale spray).

decreased level of consciousness. He died after returning to the referral hospital. A left atrial mass may result in sudden circulatory collapse.¹ Transoesophageal echocardiography imaging allows unique visualisation of masses and determination of size, shape, motion and spatial orientation within the left atrium.² Surgical removal of a mobile left atrial mass should be performed before the occurrence of a fatal embolism.

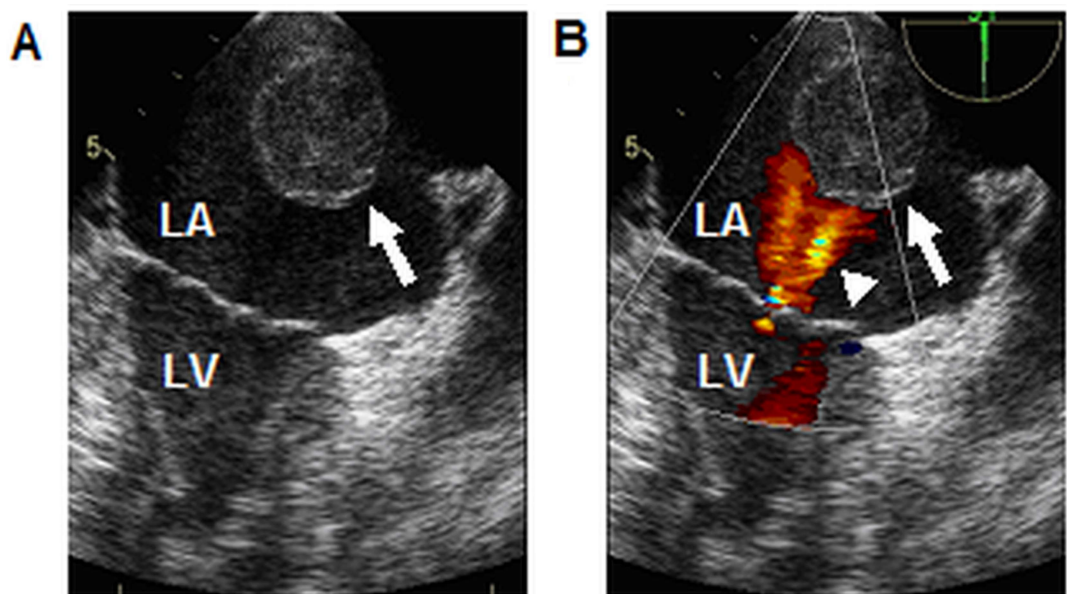


Figure 1 Transoesophageal echocardiography showing a round mass (A) floating in mitral regurgitation flow (B) (LA, left atrium; LV, left ventricle).



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Learning points

- ▶ Mobile left atrial mass is associated with a high risk of recurrence of whole-body embolism, especially cardiogenic embolic stroke.
- ▶ Transoesophageal echocardiography imaging provides detailed information of a mobile mass in the left atrium.
- ▶ Surgical removal of a mobile left atrial mass should be performed before the occurrence of a fatal embolism.

Contributors AT, AH and NT were involved in patient care and prepared manuscript and images. TI was in charge of patient care and final editing of the manuscript. All authors read and approved the final manuscript.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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- 2 Ando T, Abe H, Ro D. Case of embolism due to a floating thrombus migrating from the left atrial appendage to the ostium of the celiac artery. *Ann Vasc Dis* 2012;5:229–32.

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