

IMAGES AND VIDEOS

Biventricular mural vegetations without valvular involvement: an unusual presentation of *Staphylococcus aureus* endocarditis

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Summary

A 42-year-old intravenous drug user presented with seizures and septicaemia. CT and MRI were suggestive of multiple brain and systemic emboli, and blood and

CSF cultures were positive for *Staphylococcus aureus*. Initial transthoracic echocardiogram did not show any abnormalities but subsequent transoesophageal

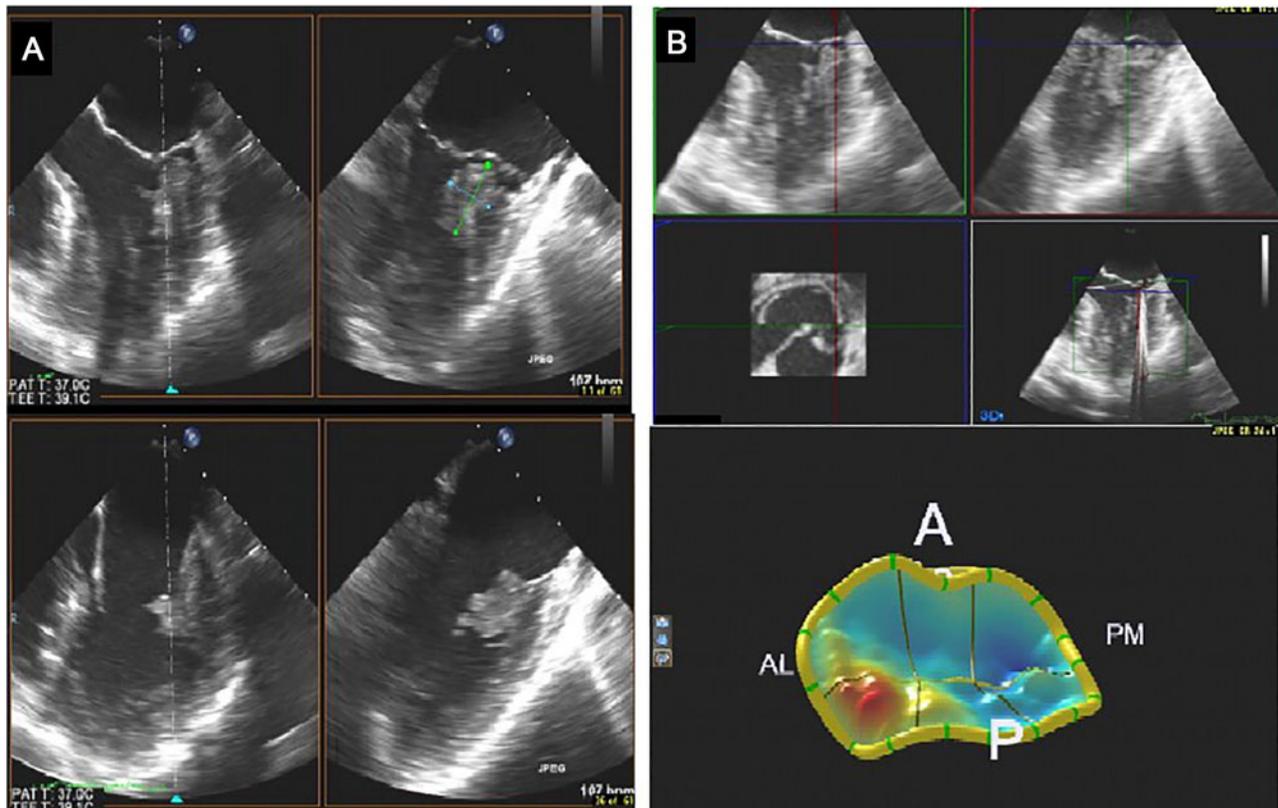


Figure 1

(A) TOE x-plane imaging of the LV mass (upper panel: systole, lower panel: diastole). Note broad attachment, irregular fronded appearance and high mobility (Video 1). (B) Mitral valve 3D model. Note systolic P1 billowing due to mass abutting the valve.

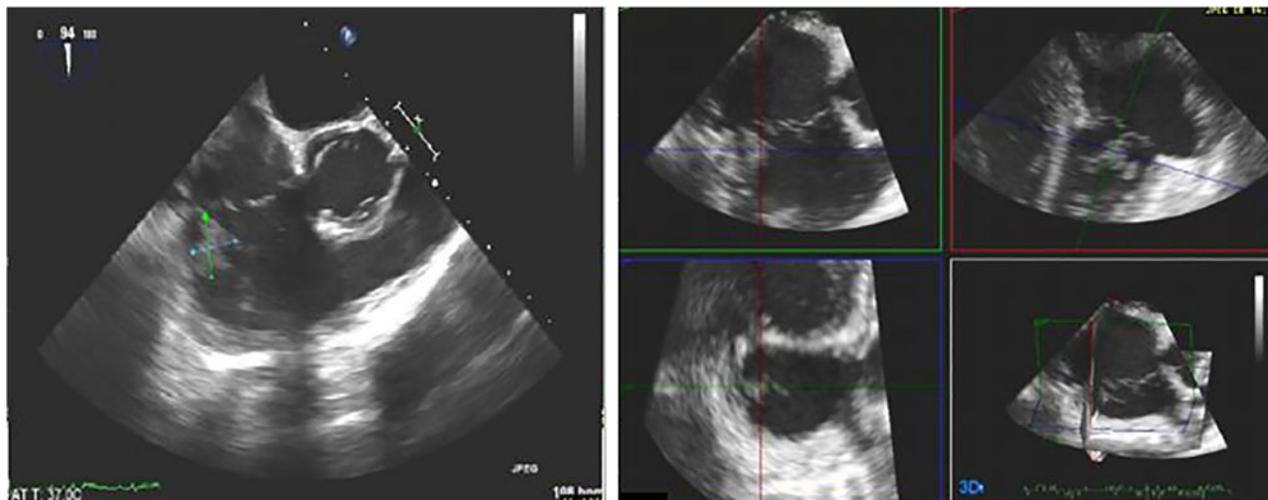


Figure 2
RV mass in tricuspid subvalvular position.

echocardiography showed two masses in the left and the right ventricle. The LV mass was large, irregular, non-mobile and attached to the basal anterolateral LV segment abutting but not involving the mitral valve. (Fig. 1). The RV mass was smaller and mobile and appeared attached to the primary chordae of anterior tricuspid valve leaflet, not encroaching the valve or affecting its function (Fig. 2). Once commenced on antibiotic treatment the patient's condition improved, and there were no further embolic events. There was no valvular damage and sequential echo studies showed significant reduction in vegetation size. Although the formal echocardiographic definition of vegetation includes non-oscillating masses on any endocardial surface (1), primary mural endocarditis without valvular involvement is considered extremely rare (2). The diagnosis is supported by the septic and embolic clinical picture but requires awareness of this uncommon presentation. The present case is even more unusual in view of the biventricular mural localisation of the vegetations, a pattern that has been mentioned in only very few case reports (3, 4).

Video 1

TOE x-plane imaging of the LV mass (upper panel: systole, lower panel: diastole). Note broad attachment, irregular fronded appearance and high mobility. View Video 1 at <http://movie-usa.glencoesoftware.com/video/10.1530/ERP-18-0046/video-1>.

Declaration of interest

The authors declare that there is no conflict of interest that could be perceived as prejudicing the impartiality of this article.

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Patient consent

Written informed consent for publication of the clinical details and/or clinical images was obtained from the patient.

Author contribution statement

Dr Kai Neoh summarised the clinical information and wrote the manuscript. Dr Jamal N Khan performed the transoesophageal echocardiogram and reviewed the manuscript. Dr Khaled Albouaini was closely involved in the management and investigation of the patient. Dr Adrian Chenzbraun reviewed the echocardiographic studies and revised the paper.

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