

IMAGES AND VIDEOS

A fatal case of large ball valve thrombus in the left atrium in a young girl

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A 17-year-old female presented to the cardiac outpatient department with dyspnoea NYHA grade IV for the past 1 month. The patient reported a history of breathlessness for the past 5 years. On examination, the pulse rate was 90/min, regular with frequent ectopics, and BP was 90/50 mmHg. On cardiovascular examination, S1 and P2 were loud with mid diastolic murmur (MDM), pan systolic murmur (PSM) and early diastolic murmur (EDM) heard. Electrocardiography (ECG) showed normal sinus rhythm (NSM) with huge P wave. Echocardiography examination revealed severe mitral stenosis (MS) (mitral valve area (MVA): 0.65 cm² by planimetry, Fig. 1A; a mean gradient of 33 mmHg across mitral valve, Fig. 1B), severe pulmonary artery hypertension (PAH), severe tricuspid regurgitation (TR), significant tricuspid stenosis (TS), severe aortic regurgitation (AR) and mild pulmonary regurgitation (PR). There was a large ball-shaped left atrium (LA) thrombus (3.65×3.55 cm), which was freely mobile and intermittently obstructing mitral orifice (Fig. 2A and B; Videos 1 and 2). The patient was immediately referred for open mitral commissurotomy/mitral valve replacement (OMC/MVR), aortic valve replacement (AVR), tricuspid valve repair and LA clot removal.

Video 1

AP4C view showing a large ball valve thrombus in the LA. Download Video 1 via <http://dx.doi.org/10.1530/ERP-14-0064-v1>

Video 2

Modified PSAX view showing a large ball valve thrombus and a clear left atrial appendage (LAA). Download Video 2 via <http://dx.doi.org/10.1530/ERP-14-0064-v2>

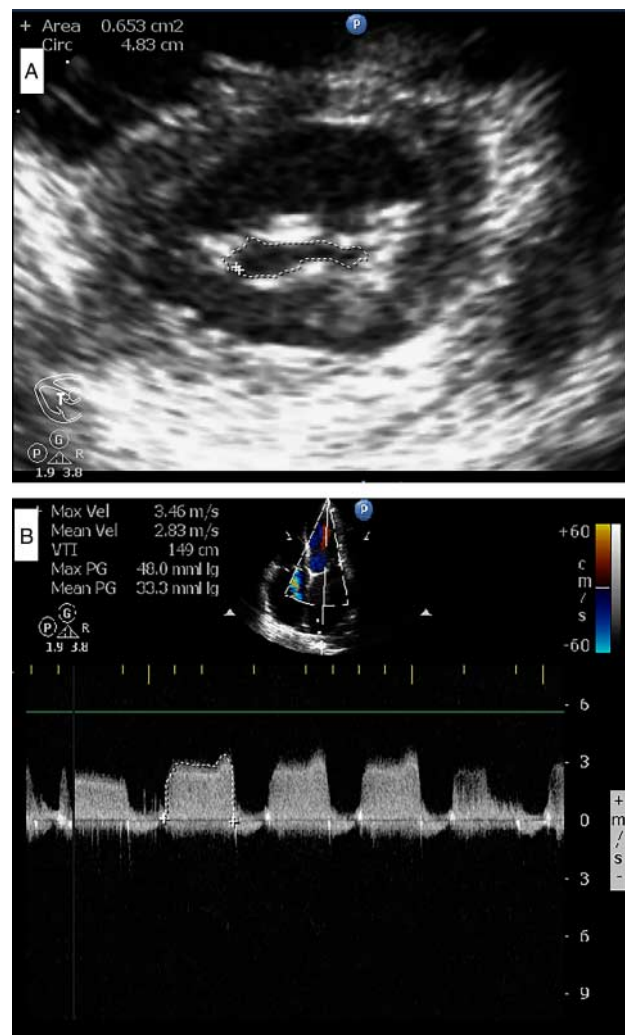


Figure 1
(A) Planimetry of the mitral valve and (B) pressure gradient across the mitral valve.

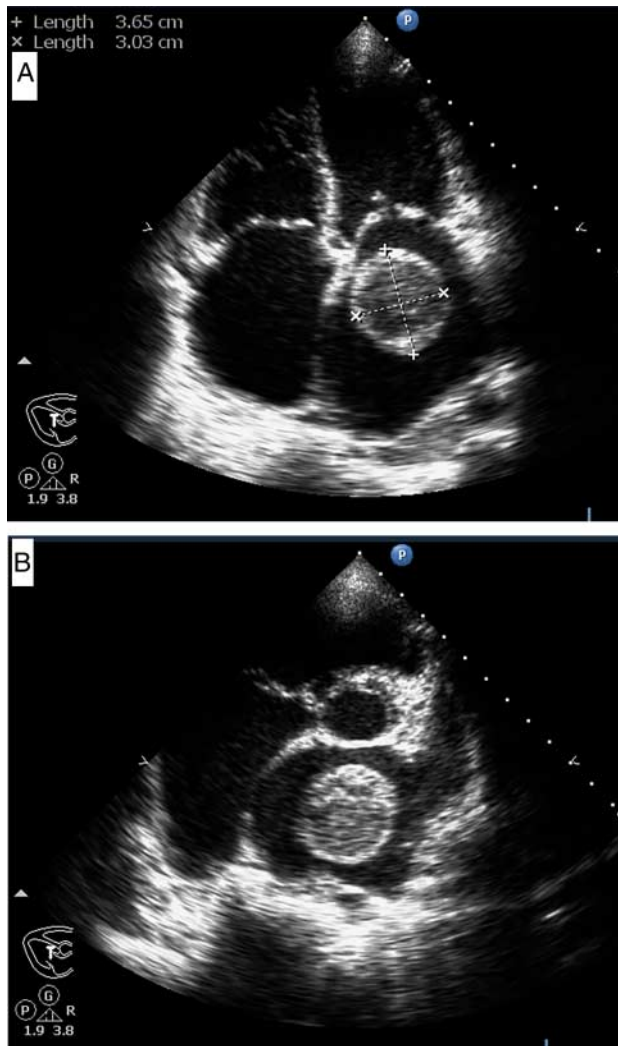


Figure 2
(A) Apical four chamber (AP4C) and (B) modified parasternal short axis (PSAX) view showing a large left atrium (LA) thrombus.

The patient succumbed to sudden cardiac death before surgery could be performed. This case was an unusual fatal presentation of rheumatic heart disease (RHD) with severe multivalvular involvement with a large ball valve thrombus at such a young age (1, 2, 3).

Declaration of interest

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

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Patient consent

Written informed consent was obtained from the patient's guardian for publication of the submitted article and the accompanying images/videos.

Author contribution statement

Dr B Kumar was the primary physician/cardiologist treating the patient. Dr A Singh helped in the preparation of the manuscript. Dr M Akram was responsible for managing the patient along with the primary cardiologist, Dr B Kumar.

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