

IMAGES AND VIDEOS

Cardiac calcified amorphous tumour

Jun K Teoh MBChB MRCP and Richard P Steeds MD FRCP

Department of Cardiology, Queen Elizabeth Hospital Birmingham, Birmingham, UK

Correspondence
should be addressed
to J K Teoh
Email
jkteoh@gmail.com

Summary

Calcified amorphous tumour (CAT) is an unusual non-neoplastic cardiac mass that may mimic malignant tumour of the heart (1) or vegetation (2). We report a 43-year-old female with type 1 diabetes and end-stage diabetic kidney disease on haemodialysis, who underwent transoesophageal echocardiography (TOE) in the setting of pyrexia and negative blood cultures. No valve-related vegetation was identified. However, a prominent calcified immobile finger-like mass, measuring 23 mm × 10 mm, was detected arising from the posterior mitral annulus adjacent to the base of P3 scallop (Fig. 1). The mass did not cause any obstruction to mitral forward flow (mean transmitral gradient 4 mmHg). Imaging of the mitral



Figure 1
2D transoesophageal echocardiography (mid-oesophageal 90° view) image of CAT arising from the posterior mitral annulus.

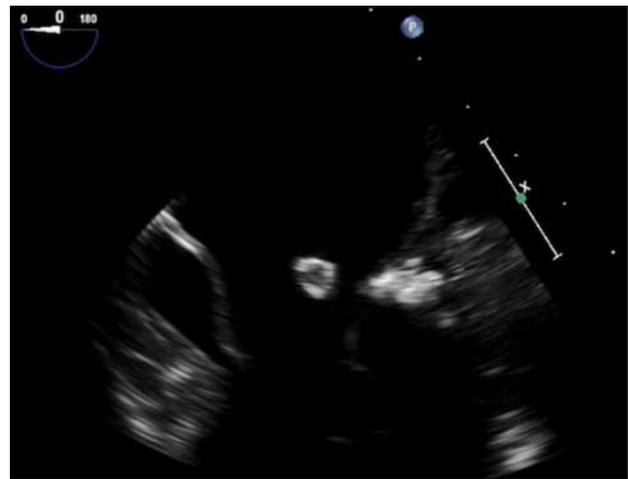


Figure 2
2D transoesophageal echocardiography (mid-oesophageal 0° view; A2/P2 level) image of CAT 'dangling' on the upstream/atrial side of the mitral valve.

valve in the mid-oesophageal 0° view at the A2/P2 level revealed the mass to be 'dangling' on the upstream side of the mitral valve leaflets (Fig. 2). A subsequent 3D TOE image clearly demonstrated that the mass projects in an oblique position from the posterior mitral annulus (adjacent to base of P3) towards the mitral orifice space anterior-superior to the P2 scallop (Fig. 3 and Video 1) giving rise to the appearance as shown in Fig. 2. The patient has been entered into an annual echocardiographic surveillance programme to monitor progression of the mass. The association between CAT and end-stage kidney disease is thought to relate to dysfunctional calcium homeostasis mechanisms (3).

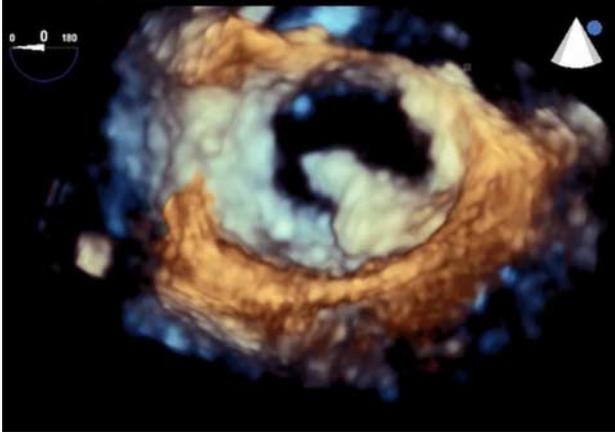


Figure 3
3D transoesophageal echocardiography image of CAT projecting in an oblique position towards the centre of the mitral valve orifice.

Video 1

3D transoesophageal echocardiography video of CAT viewed from the left atrium. Download Video 1 via <http://dx.doi.org/10.1530/ERP-14-0072-v1>.

Declaration of interest

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

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Patient consent

Patient has provided written consent.

Author contribution statement

Both J K Teoh and R P Steeds jointly performed the transoesophageal echocardiographic study, consulted on the patient's cardiology care, and wrote and approved the manuscript.

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