TOE imaging of a large aortic mass: an unusual cause of systemic embolization in a septic patient

Sarah R Blake, Jamal Khan and Adrian Chenzbraun
Royal Liverpool University Hospital, Liverpool, UK

Summary

A 72-year-old woman presented with sepsis and lower limb ischaemia. Transoesophageal echocardiography (TOE) for suspected endocarditis revealed no cardiac pathology or source of emboli but a large thrombus-like mass was noted in a normal-size descending aorta (Fig. 1A, Video 1). Repeat TOE after two weeks of anticoagulation showed two new masses and no change in the size of the original one (Fig. 1B). The patient died after bilateral leg amputation. There was no PM to provide pathology confirmation, but the most likely diagnosis was of a thrombus, possibly infected. Large aortic clots in a mildly diseased aorta are unusual and a rare cause of systemic embolization (1). TOE is considered the best imaging technique for aortic thrombi (2), and in this case, it clarified the correct diagnosis. A systematic TOE protocol (3) with assessment of all structures including descending aorta should be followed irrespective of the original indication. In the present case, a more focussed study might have missed the main pathology that was captured due to the thoroughness of the operator in completing the scan including all aortic views.

Video 1

References


Received in final form 22 March 2017
Accepted 23 March 2017
Accepted Preprint published online 23 March 2017
Figure 1
(A) First TOE: large thrombus at 30cm depth overlying a calcific but uncomplicated plaque (arrow). (B) Repeat TOE: lack of regression of initial thrombus (1) and two new smaller thrombi at 35 cm (2) and 40 cm (3). Left panel: X-plane imaging; Right panel: 3D imaging.