

## An unusual cause of cardioembolic stroke

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A 30 year-old female presented with acute left sided weakness. Brain magnetic resonance angiography revealed acute stroke involving the right middle cerebral artery. TEE was performed to look for cardiac sources of embolism. 2D and 3D assessment of the mitral valve disclosed a globular echo dense mass ( $1.7 \times 0.6$  cm) encasing the posterior leaflet (Fig. 1a, b, arrows). Infectious workup revealed negative blood cultures. Anticardiolipin antibody titers were elevated and lupus anticoagulant test was positive with negative serological workup for other autoimmune diseases. Patient underwent mechanical valve replacement given large embolic event. Gross and

microscopic pathology specimens of the mitral valve revealed red tan vegetation (Fig. 1c) rich in fibrin and platelets (Fig. 1d), consistent with non-bacterial thrombotic endocarditis secondary to antiphospholipid syndrome. Warfarin anticoagulation was commenced life-long and patient was discharged home.

Antiphospholipid associated cardiac valve lesion is a rare entity with significant embolic potential [1]. Surgical intervention along with long-term anticoagulation is needed with large thromboembolic events and evidence of leaflet structural damage [2].

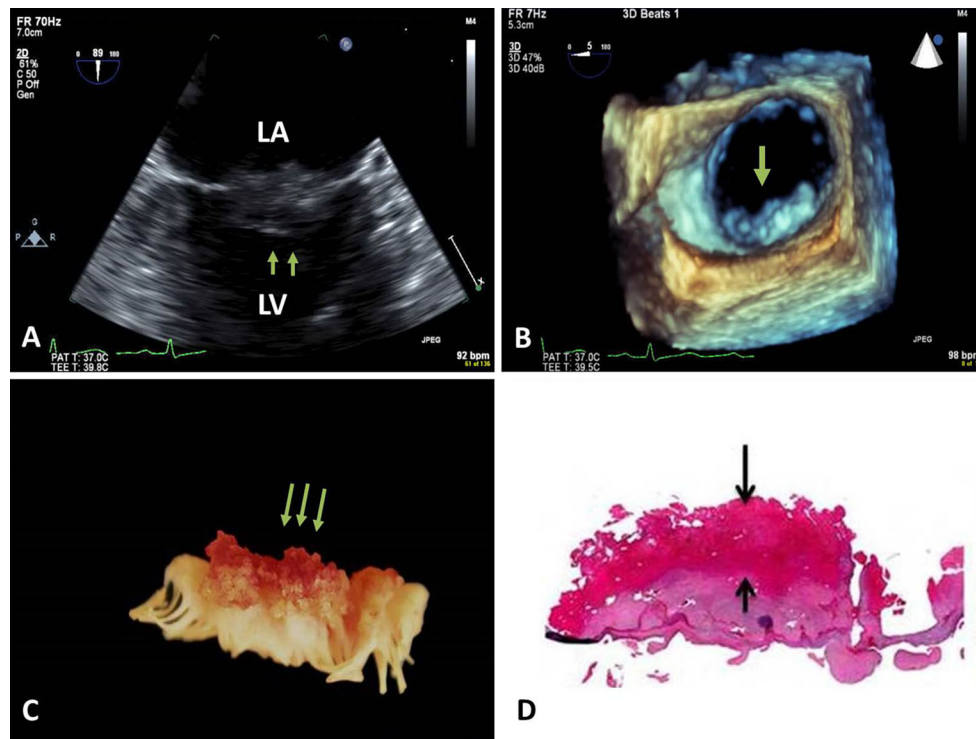
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**Fig. 1** **a** Two dimensional TEE of the mitral valve in the bicomisural view showing echo dense mass ( $1.7 \times 0.6$  cm) encasing the posterior leaflet (*arrow*). **b** Three dimensional TEE of the mitral valve showing thickened posterior leaflet (*arrow*). **c** Gross pathology specimen of the excised mitral valve showing *red tan* vegetation with

soft friable, papillary surface and a “tacked on” appearance on the free margin. **d** Low power photomicrograph showing fibrin-rich marantic vegetation (*arrows*) on the atrial surface of mitral valve with myxomatous degeneration and fibrosis (*star*)—H&E stain. *LA* left atrium, *LV* left ventricle

#### Compliance with ethical standards

**Conflict of interest** None.

#### References

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2. Silbiger JJ (2009) The valvulopathy of non-bacterial thrombotic endocarditis. *J Heart Valve Dis* 18:159–166