

Embolic stroke with Lambl's excrescence: a rare presentation

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A 72-year-old female presented with right arm weakness and motor aphasia to our outpatient transient ischemic attack clinic. The only known vascular factor was a background of hypercholesterolaemia. She had no other cardiovascular risk factors. Clinical examination was unremarkable. Manual pulse and electrocardiogram (ECG) confirmed the patient was in sinus rhythm, no carotid bruit was identified. There were no abnormal heart sounds. MRI head was undertaken that confirmed left basal ganglia infarct. There was no carotid artery stenosis on duplex ultrasonography. Paroxysmal atrial fibrillation was excluded on 72-hour ambulatory ECG monitoring. Transoesophageal echocardiogram (ECHO) was performed, which confirmed rheumatic mitral valve with only mild stenosis and regurgitation and no evidence of left atrial or appendicular clot or thrombus. Transoesophageal ECHO also identified small patent foramen ovale/stretched atrial septal defect, but the patient had no history of pulmonary embolism or deep venous thrombosis. Thickened mitral leaflets with multiple filiform fronds were noted at the tips of mitral valves. Aortic valve leaflets were also mildly thickened with good excursion. Multiple Lambl's excrescences were noted on aortic valves, some were calcified. There was no evidence of atherosclerosis of the thoracic aorta. Antinuclear antibody and antineutrophil cytoplasmic antibody tests were negative, erythrocyte sedimentation rate was not raised and syphilis serology was negative. Coagulopathy results (lupus anticoagulant, anticardiolipin antibodies) came back within normal limits. The cardio-stroke multidisciplinary team suggested anticoagulation, which was initiated. Following investigations and once all the results were collated a diagnosis of embolic stroke was given, secondary to Lambl's excrescence. Follow up was arranged at 6 weeks, which the patient attended. The patient did not report any further events, no further cerebrovascular ischemic events were identified in the follow up.

Figure 1 MRI head showing hyperintensity in the left lentiform nucleus (arrow)

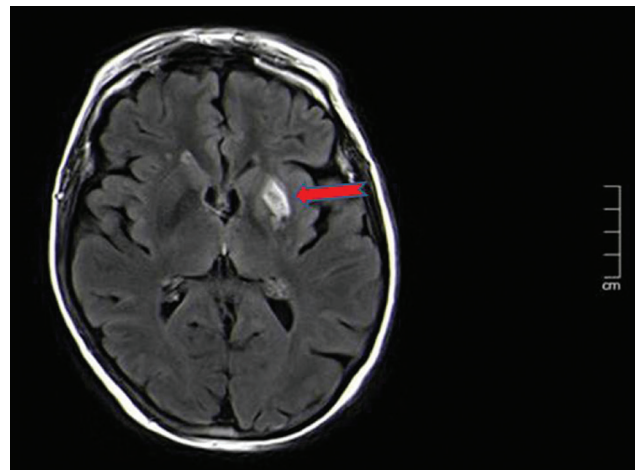
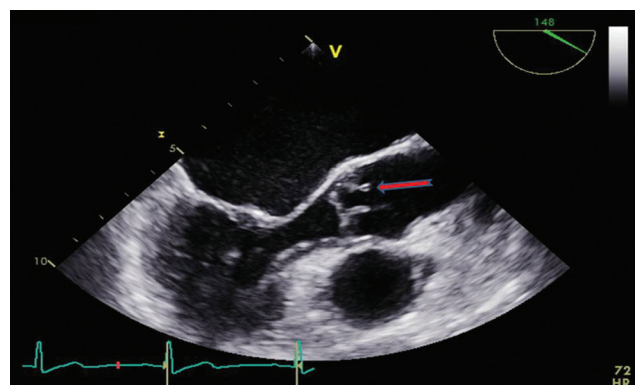



Figure 2 Echocardiogram demonstrating Lambl's excrescence on aortic valves (arrow)



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Lambl's excrescences, first described by Vilém Dušan Lambl, Bohemian physician, in 1856,¹ are an uncommon but an identifiable cause of cardioembolic stroke.² These are slender filamentous processes at the sites of valve closure.³ The differential diagnosis includes fibroelastoma, vegetations, myxoma, thrombi, cardiac neoplasms and metastases.⁴ Histopathologically Lambl's excrescence and cardiac papillary fibroelastomas are similar, but cardiac papillary fibroelastomas are larger in size. Additionally, Lambl's excrescence is typically found at the line of valve closure, whereas cardiac papillary fibroelastomas can be found away from the line of valve closure and on

the endocardial surfaces of atria or ventricles. These differences can be easily identified with transoesophageal ECHO because of its high temporal and spatial resolution.⁵ We, therefore, think that our case is an excellent example supporting Lambl's excrescences as an aetiological factor for stroke, as other potential cardioembolic causes were ruled out. There are no randomised control trials to support any specific treatment but case reports in literature suggest a more general therapeutic approach with either anticoagulation or antiplatelet therapy for a single embolic stroke and surgical intervention for recurrent phenomenon.⁶ 

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