A double barrelled myxoma

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A 28-year-old female patient was referred to our emergency department with a sudden left-sided weakness. Besides a left facial asymmetry and impaired fine motor coordination in the left hand, physical examination revealed a tumour plop. Computer tomography neuroimaging showed recent and previous cerebral infarction in both hemispheres with normal carotid arteries. The laboratory findings were unremarkable and electrocardiogram showed sinus rhythm.

Transthoracic echocardiography revealed a large mass in both atria adherent to tricuspid and mitral valve (Panels A – C). The mass prolapsed intermittently through the tricuspid and mitral valve into the right and left ventricle (see Supplementary material online, Videos S1 and S2).

The mass was resected, causing a large intra-atrial septal defect (Panels D and E). The septal defect was closed with a Goretex patch. Her postoperative recovery was complicated by a transient ischaemic attack. Histopathology revealed a bialtrial myxoma (Panel F).

Atrial myxoma is the most common benign tumour of the heart. As in our case, they can cause multiple embolic infarctions. Cardiac myxomas arise from the congenital multi-potent mesenchyme and can arise in any of the cardiac chambers with 75 – 80% in the left atrium. Bialtrial myxoma is found in <2.5% of all cases. In this particular case, a pre-existing patent foramen ovale is the likely cause of the bialtrial myxoma. Treatment consists of surgical resection to prevent further cardiac or neurologic sequelae. This procedure is often combined with intra-atrial septal defect reconstruction.

Panels A – C: Two-dimensional echocardiography in parasternal short-axis view (A), apical four-chamber view (B), and the parasternal long axis (C) shows bialtrial myxoma adherent to tricuspid and mitral valve.

Panels D – F: Intra-operative photograph showing atrial tumour mass removed (D and E). Hematoxylin & eosin stained histology showing myxoid matrix with myxoma cells that partly form interconnected cords (F).

Supplementary material is available at European Heart Journal online.

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