An interesting case of diffuse large B-cell lymphoma

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Background:

Primary cardiac lymphomas are a rare disease and form around 1% of tumours in the heart. Here we present a case of a patient with a primary cardiac lymphoma.

Case:

A 70 year old female Caucasian lady presented with palpitations and was diagnosed with atrial fibrillation (AF) with tachy-brady syndrome. She underwent a dualchamber pacemaker insertion (St. Jude Medical 'Assurity' MRI conditional). Baseline echocardiography was normal.

Beta-blocker medication was titrated to control ventricular high rates. Two months later she presented with symptoms of heart failure (NYHA III) and facial swelling. This was felt to be secondary to uncontrolled AF and ablation was considered. Repeat echocardiography demonstrated a large right atrial mass, which was confirmed on computed tomography (Figure 1).



Figure 1

FDG-PET showed a gross metabolically active mediastinal lesion centred upon the right atrium and extending into the right ventricle and indenting the IVC (Figure 2).



Figure 2

Cardiac magnetic resonance revealed an 11 x 11 x 8cm soft tissue mass completely filling the right atrium encasing the atrial pacing lead (Figure 3a)



Figure 3a

and compressing the inferior vena cava (Figure 3b).



Figure 3b

The mass was vascular, enhancing with the tissue phase of the systemic circulation. Right atrial biopsy confirmed diffuse large B cell lymphoma and she was commenced on R-CHOP chemotherapy.

Discussion:

This demonstrates how a rare condition can present with very common symptoms. Importantly in this case the arrhythmias predated echocardiographic evidence of the mass and it is likely due to the proximity of the tumour to the cardiac conduction tissue.

