# Large atrial mass in a patient with Crohn's disease: organised thrombus mimicking a myxoma

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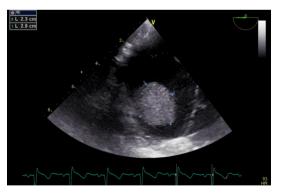
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#### **DESCRIPTION**

A right atrial mass was incidentally discovered on a CT in a 30-year-old female patient with an 11-year history of Crohn's disease. Medical treatment included infliximab and azathioprine. She denied chest pain, palpitations, orthopnoea or dyspnoea. Transoesophageal echocardiography showed a large, 2.9×2.2 cm, non-obstructive, mobile mass attached by a broad stalk to the lateral wall of the right atrium (online supplementary video 1 and figure 1). An atrial myxoma was suspected, and the tumour was completely extirpated. No other mass was found inside the atrium, and the cava veins were patent and free. Surprisingly, histological examination revealed an organised thrombus with no evidence of myxoma. The patient was discharged with long-term warfarin and had an uneventful recovery and no further episodes of thrombosis (2-year follow-up).

The most frequent causes of thrombus formation in the right atrium are transvenous pacing leads and prolonged central venous cathethers; however, there are a few reports of right atrial thrombi in patients with systemic inflammatory conditions, such as systemic lupus erythematosus and Behçet's disease. Patients with Crohn's disease are known to have a higher risk of thromboembolic events than



**Figure 1** Transoesophageal echocardiogram showing a 2.2×2.9 cm mass in the right atrium.

the normal population, <sup>1</sup> partly explained by inflammatory activity and prothrombotic abnormalities, including downregulation of natural anticoagulant mechanisms, increased platelet count, dysfunctional endothelium and impaired fibrinolysis.

An intracardiac mass poses a difficult diagnostic challenge because of similar echo densities of myxoma and thrombi. Contrast echocardiography helps distinguish thrombi without perfusion from tumours with varying degrees of perfusion.<sup>2</sup>

## **Learning points**

- ► The type of cardiac tumours is indicated by the appearance and location of the tumour on echocardiography, but definitive classification is given by histopathological examination.
- ► For differential diagnostic purposes, MRI, contrast echocardiography or anticoagulant treatment will often be appropriate in patients with an intracardiac mass prior to cardiac surgery.
- ► Thrombus formation should be considered as a rare differential diagnosis of intracardiac masses in patients with systemic inflammatory conditions such as Crohn's disease.

**Contributors** ELG was responsible for all steps in the preparation of this manuscript.

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