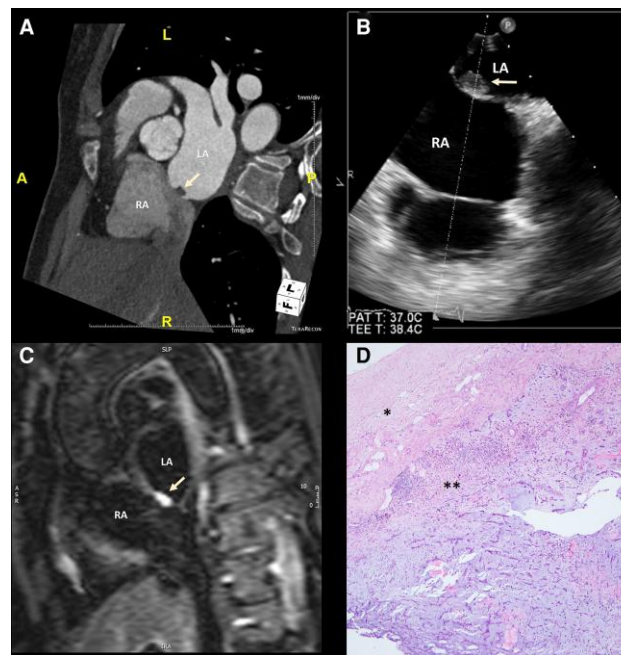


# A teeny-tiny atrial myxoma: an incidental finding on pre-procedural imaging for planned atrial fibrillation catheter ablation—case report

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**Figure 1** (A) Pre-procedural cardiac computed tomography angiography vertical long-axis view oriented along the long axis of the mass. Note that there is a thickening at the level of the interatrial septum (fossa ovalis) where a small (infracentimetric) cone-shaped mass is observed and seems to protrude into the left atrium; (B) Transoesophageal echocardiography modified bicaval tricuspid view. Note the small and nodular echo-homogeneous structure. The mass has an irregular shape and bulges into the left atrium chamber; (C) T<sub>2</sub>-weighted cardiac magnetic resonance imaging (modified view: vertical axis). Note the increased signal at the site of interatrial septum thickening; (D) HE (40X): Transition between normal cardiac tissue (\*) and cardiac myxoma (\*\*). This lesion is composed of round to oval or stellate cells in abundant loose myxoid matrix containing abundant mucopolysaccharides. LA = left atrium; RA = right atrium.

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## Case summary

Myxomas are the second most common primary benign heart tumours,<sup>1</sup> most frequently diagnosed as considerably large—mean diameter ~50 mm—pedunculated masses.<sup>2</sup> We here report the case of a 60-year-old woman with paroxysmal atrial fibrillation referred to our centre for catheter ablation in whom a teeny-tiny atrial myxoma was incidentally diagnosed.

## Case presentation

Other than recurrent palpitations, the patient's past history and physical examination were unremarkable. She underwent pre-procedural computed tomography angiography, as per protocol. A thickening of the interatrial septum (IAS), in continuity with a ~4 × 5 mm exophytic mass protruding into the left atrium (LA) ([Figure 1A](#), [Supplementary material online, Figure S1](#)), was documented. Therefore, ablation was postponed, and she was admitted for additional investigation.

Revisiting her history, she denied positional dyspnoea, syncope, constitutional symptoms and/or embolic events. The ECG and laboratory assessments (haemoglobin 13.5 g/dL, C-reactive protein <0.10 mg/dL, erythrocyte sedimentation rate 22 mm/h, IgG 1070 mg/dL, NT-proBNP 96 pg/mL) were within normal. Transoesophageal echocardiography showed a ~7 × 8 mm echo-homogenous mass at the level of the *fossa ovalis*, bulging into the LA ([Figure 1B](#), [Supplementary material online, Videos S1 and S2](#)). The magnetic resonance image further confirmed the IAS thickening—presenting with increased signal intensity on T<sub>2</sub>-weighted STIR images ([Figure 1C](#)) and IAS 3D late-gadolinium enhancement (see [Supplementary material online, Figure S2](#)).

The 'Heart Team' favoured surgery, as a cardiac myxoma was most likely. Accordingly, she underwent surgical resection, via a biatrial approach. A small gelatinous polypoid LA mass was identified and, as it was attached to the IAS, partial septectomy was necessary—the

surgical defect was closed with a cloth patch of autologous pericardium. Surgical radiofrequency was used to achieve pulmonary vein isolation. Cardiac myxoma was later confirmed on histopathology ([Figure 1D](#), [Supplementary material online, Figures S3–S5](#)). The patient was discharged on an anti-arrhythmic regimen plus 6-month anticoagulation. Follow-up is uneventful at 12 months post-surgery. We plan on scheduling a bi-annual echocardiography, particularly as there were no Carney syndrome findings.

Incidental diagnoses of small cardiac tumours are a likely scenario in high-volume centres using routine pre-procedural cardiac imaging. This case highlights the crucial role of and the importance of attention to detail in seemingly mundane routine evaluation.

## Supplementary material

[Supplementary material](#) is available at *European Heart Journal – Case Reports*.

**Acknowledgement:** None.

**Slide sets:** A fully edited slide set detailing this case and suitable for local presentation is available online as [Supplementary data](#).

**Consent:** The authors confirm that written consent for submission and publication of this case report including images and associated text has been obtained from the patient in line with COPE guidance.

**Conflict of interest:** None declared.

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## References

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