

# Lipomatous hypertrophy of the interatrial septum

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**ABSTRACT** Lipomatous hypertrophy of the interatrial septum is an uncommon condition characterised by the excessive deposition of adipose tissue in the interatrial septum. It is diagnosed by the characteristic thickening of the interatrial septum with sparing of the foramen ovale giving rise to a dumbbell shape appearance. Surgical excision is indicated in patients with intractable symptoms due to severely thickened septum. We report a patient who presented with atrial arrhythmia possible due to lipomatous hypertrophy of interatrial septum.

**KEYWORDS** Lipomatous hypertrophy, foramen ovale, atrial tumor, interatrial septum

**LIST OF ABBREVIATIONS** Lipomatous hypertrophy of the interatrial septum (LHIS)

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Lipomatous hypertrophy of the interatrial septum is a rare entity that is characterised by the excessive deposition of fat in the interatrial septum and a septal thickness of > 2 cm. We present the case of 77-year-old woman who was admitted with atrial arrhythmias and ventricular ectopic beats. She went on to have transthoracic echocardiogram followed by a transoesophageal echocardiogram (see Figure 1) that confirmed the diagnosis of LHIS. She had little in the way of symptoms; hence she was managed conservatively.

## DISCUSSION

The reported incidence of LHIS at autopsy is about 1%, whereas transthoracic echocardiography studies revealed incidences of up to 8%. Although in most cases LHIS is not clinically apparent, it may cause cardiac arrhythmias.<sup>1</sup> Lipomatous hypertrophy of the interatrial septum might lead to a variety of rhythm disturbances such as P-wave abnormalities, atrial fibrillation, and even sudden death. Malignant cardiac arrhythmias may occur as a result of extensive bleeding into the lesion. The lesion has a characteristic dumbbell shape because of typical sparing of the foramen ovale.<sup>2</sup> Patients who experience intractable symptoms, surgical excision of the lesion may provide relief. Lipomatous atrial hypertrophy can be a more generalised and progressive abnormality, therefore it should be considered in the differential diagnosis of echocardiographic intracavitary right atrial masses.<sup>3</sup>



**FIGURE 1** Transoesophageal echocardiogram showing the lipomatous hypertrophy of the interatrial septum (LHIS) and foramen ovale. The coloured doppler shows there to be no flow across the inter atrial septum.

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