

# LIPOMATOUS HYPERTROPHY OF THE INTERATRIAL SEPTUM: A 3-DIMENSIONAL TRANSESOPHAGEAL ECHOCARDIOGRAPHY APPEARANCE

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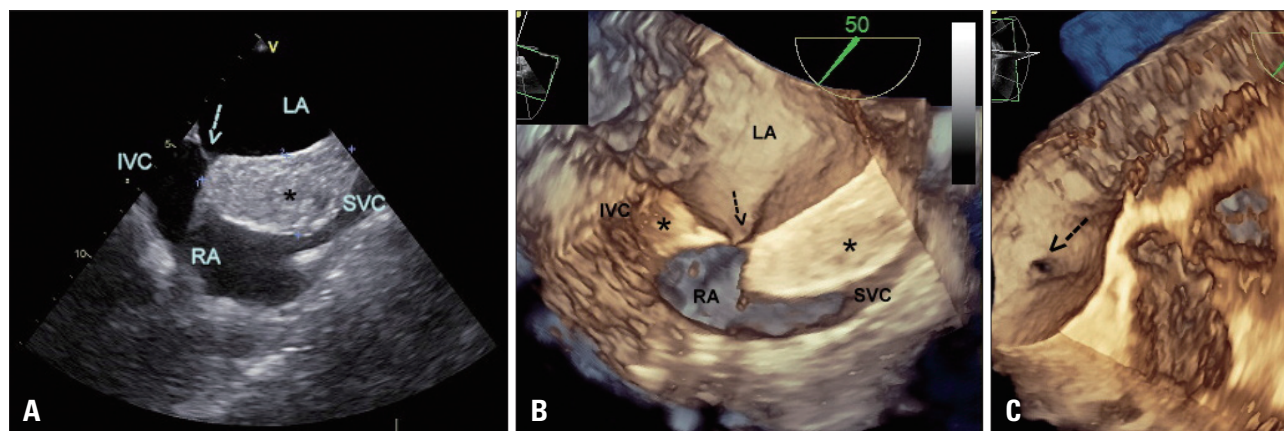
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Lipomatous hypertrophy of the interatrial septum (LHIS) is a benign cardiac disorder characterized by massive fatty deposits in the interatrial septum.<sup>1-3)</sup> Although the precise etiology is unknown, it has been suggested that LHIS is associated with obesity and aging.<sup>1,2)</sup> Mostly asymptomatic, LHIS is usually an incidental finding which does not require any specific treatment. Surgical management should be considered very rare, in patients with intractable severe rhythm disorders, hemodynamic instability, symptoms of superior vena cava syndrome or right atrium obstruction.<sup>1-3)</sup> Despite the fact that to date more than 200 cases have been published, LHIS remains

under recognized and frequently misdiagnosed as a malignant tumor. Therefore, recognition of this lesion, with reported incidence of up to 8%, is of highest importance.<sup>1,2)</sup>

A 72-year-old asymptomatic obese woman (body mass index = 29 kg/m<sup>2</sup>) referred to our cardiology department because transthoracic echocardiography showed a right atrial mass highly suspicious of a tumor. Echocardiographic findings suggestive for LHIS were revealed by 2-dimensional and real time 3-dimensional transesophageal echocardiography (RT3DTEE). Moreover, as it is shown in Fig. 1, the advantage of RT3DTEE is the possibility of detailed and accurate spatial visualization



**Fig. 1.** 2D (A) and 3D (B and C) transesophageal echocardiography appearance of lipomatous hypertrophy of the interatrial septum (IAS, asterisks) can be summarized as: 1) IAS thickening > 2 cm, 2) a projection of the mass only into the right atrium, 3) a homogenous appearance of the mass, 4) sparing the membrane of the fossa ovalis (arrows) that, in case of affecting proximal and distal part of IAS, might result in characteristic bilobal (dumbbell shape) IAS appearance. LA: left atrium, RA: right atrium, SVC: superior vena cava, IVC: inferior vena cava.

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of cardiac structures which enabled diagnosis of LHS without using other imaging techniques (e.g., computed tomography, cardiac magnetic resonance imaging) or tissue biopsy.

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