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CARDIOVASCULAR FLASHLIGHT

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Lipoma of the interventricular septum

Lorenzo Monti^{1*}, Claudia Scardino², Barbara Nardi¹, and Luca Balzarini¹

¹Radiology Department, Humanitas Research Hospital, I.R.C.C.S., Via Manzoni 56, Rozzano, MI 20089, Italy; and ²School of Cardiology, University of Milan, Milan, Italy

*Corresponding author. Tel: +39 0282246648, Fax: +390282246692, Email: lorenzo.monti@humanitas.it

A 49-year-old man without cardiovascular risk factors and a negative cardiovascular history was referred to our Hospital for further characterization of a solid, hyperechoic mass in the mid portion of the interventricular septum (Panel A), incidentally found on a check-up transthoracic echocardiogram. The cardiac magnetic resonance (CMR) study showed a well-defined ovoid mass, diameter 29 × 17 mm, located in the mid portion of the interventricular septum. The mass' signal was hyperintense on T1-weighted sequences (Panel B), with a complete signal suppression after a fat-saturation prepulse (Panel C). In fat-saturated oedema images ('T2 STIR'), the mass was hypointense, further confirming the solid, hypovascular nature of the content. No signs of fibrosis were evident at late gadolinium enhancement study (Panel D). These findings are diagnostic for an intramyocardial lipoma.

Cardiac lipomas are benign, encapsulated tumours, composed of mature fat cells, usually located in the interatrial septum: they account for 5% of primary cardiac tumours. Lipomas of the interventricular septum are extremely rare, with a prevalence of <1 of 1000 benign cardiac tumours. Their diagnosis is often incidental: the clinical symptoms of cardiac lipomas are non-specific, often absent and mainly related to their location and size. Surgical resection is recommended in symptomatic patients with intractable arrhythmias or flow obstruction within the heart. Treatment strategy is a dilemma when the patient is asymptomatic, and no guideline exists. This patient was managed with an implantable loop recorder in order to monitor over time the presence and frequency of ventricular arrhythmias.

