A giant pericardial lipoma and left ventricular aneurysm: A rare combination 🔍

A 52-year-old female with no history of cardiovascular diseases presented to our hospital with palpitation after exertion for several months. Physical examination was unremarkable. Transthoracic echocardiographic showed a giant pericardial mass (10×9×4 cm) adjacent to the left ventricular inferior wall (Fig. 1a and 1b. Supplemental Video S1). The extent of mass was limited by the poor acoustic window. Cardiovascular magnetic resonance (CMR) imaging demonstrated a well-delimited mass within the pericardium surrounding the basal to apical inferior wall of the left ventricle (Fig. 1c and 1d. Supplemental Videos S2 and S3). The mass showed homogeneous high signal intensity on T1- and T2-weighted images with signal loss following a fat suppression on STIR sequence, suggestive of pericardium lipoma (Fig. 1e and 1f). Additionally, CMR revealed two left ventricular aneurysms located at the mid-segment thinning of the left ventricular inferior wall and apex, bulging outward, respectively (asterisk, Fig. 1c and 1d), CMR showed normal biventricular size and function. Furthermore, no obstructive coronary artery disease was seen on coronary angiography. The patient underwent surgical resection of the mass, and a yellow, soft, and well-encapsulated mass in the pericardium, measuring 10×8×4 cm, was confirmed (Fig. 1g). The patient was mildly symptomatic; therefore surgical indications for left ventricular aneurysms were not well established. Histopathological examination of the mass confirmed a benign lipoma (Fig. 1h). The patient's postoperative course was uneventful and she was discharged in a good condition 10 days after the operation. She is doing well at a 9-month follow-up. Our case highlights the value of CMR for detailed noninvasive assessment of these two findings.

Informed consent: Written informed consent was obtained from the patient.

Supplemental Video 1. Video clip of Figure 1b. Two-dimensional transthoracic echocardiography showing a giant pericardial mass without color flow

Supplemental Video 2 and 3. Video clips of Figure 1c and 1d. Cine-MRI revealed a well-delimited mass and two left ventricular aneurysms

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Figure 1. (a and b) Apical 2-chamber and parasternal left ventricular long-axis views showing a giant pericardial mass adjacent to the left ventricular inferior wall. (c and d) Cardiac MRI revealing a well-delimited mass within the pericardium surrounding the inferior wall of the left ventricle and two left ventricular aneurysms (asterisk). (e and f) STIR sequence showing homogeneous high signal intensity on T1- and T2-weighted images with signal loss following fat suppression. (g) Intraoperative image of the mass. (h) Hematoxylin and eosin staining of the specimen (magnification 100×) confirmed adipose cell.

LA - left atrium; LV - left ventricular; RA - right atrium; RV - right ventricular