Liposarcoma metastasis of the heart: burst shoots to reveal it

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A 36-year-old male in chemotherapy treatment for a surgically removed liposarcoma of the shoulder underwent transthoracic echocardiography to evaluate cardiac function. The echo showed a great dishomogeneous mass of ~6 cm diameter close to the lower and upper left pulmonary vein causing an obstruction to the left ventricular inflow with a mean transmitral gradient of 4 mmHg (Figure 1A–C; see Supplementary data online, Movie Clip S1). Three-dimensional real-time transoesophageal echocardiography was performed to understand better the relationship with the nearest cardiac structures. The mass (volume ~36.5 mL), originating from the left upper pulmonary vein, extended to the left atrium and prolapsed into the ventricle (Figure 1D–F; see Supplementary data online, Movie Clip S2 and S3). No pulmonary venous obstruction gradient was found. These findings were well correlated with magnetic resonance imaging (Figure 1G); the biopsy, performed after surgical removal (Figure 1H and I), revealed that it was a liposarcoma metastasis.