

## Primary left ventricular cardiac sarcoma

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Cardiac sarcomas are rare tumors with an unfavourable prognosis [1]. A 72 year-old male patient was admitted to our hospital complaining of worsening exertional dyspnoea and orthopnoea (NYHA III) over a period of almost a month. Transthoracic echocardiography (Fig. 1A–D) and cardiac magnetic reso-



**Figure 1. A.** Two-dimensional echocardiogram, four-chamber apical view of the heart presenting a well-defined mass occupying a large portion of the left ventricle cavity, as attached to the lateral, septal and apical wall of the left ventricle; **B.** Two-dimensional echocardiogram, three-chamber view of the heart presenting a well-defined mass occupying a large portion of the left ventricle cavity, as attached to the anterior interventricular and posterior wall of the left ventricle; **C.** Two-dimensional echocardiogram, two-chamber view of the heart presenting a well-defined mass occupying a large portion of the left ventricle cavity, as attached to the anterior interventricular and posterior wall of the left ventricle; **D.** Two-dimensional echocardiogram, three-chamber apical view using sonovue contrast material. Myocardial contrast echocardiography enhances the interface between the blood pool and adjacent tissue or even mass, helping defining the tumor's border, size and attachments.

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**Figure 2. A.** Four-chamber cine cardiac magnetic resonance imaging view using the balanced steady-state free precession technique. A well-defined mass can be seen attached to the interventricular septum and left ventricle wall; **B, C.** Continuous long axis views of the ventricle using the balanced steady-state free precession technique: tumor attachments to left ventricle wall are better delineated; **D.** Four-chamber views in horizontal long axis contrast-enhanced inversion-recovery magnetic resonance image after the administration of gadolinium demonstrates clear tumor enhancement.

nance (Fig. 2A–D) revealed a well-defined mass attached to the interventricular septum and left ventricular wall. The diagnosis was confirmed by biopsy during cardiac catheterization. Echocardiography and cardiac magnetic resonance evaluated the tumor size, attachments and mobility and estimated the option of surgical resection of the mass. These tumors are often asymptomatic until advanced, and even then can produce non-specific symptoms and mimic other pathology [2].

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## References

- Ramalingama R, Moorthya N, Raob VR, Nanjappaa MCh. Primary cardiac sarcoma presenting as shock. Ind J Thorac Cardiovasc Surg, 2009; 25: 31–33.
- Devbhandari MP, Meraj S, Jones MT, Kadir I, Bridgewater B. Primary cardiac sarcoma: Reports of two cases and a review of current literature. J Cardiothorac Surg, 2007; 2: 34.