



IMAGE IN CARDIOLOGY

Cardiac chondromyxoma

Condromixoma cardíaco

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The authors present the case of a 68-year-old woman with arterial hypertension, complaining of progressive dyspnea, fatigue, anorexia and weight loss of four months duration, who was referred for a transthoracic echocardiogram to study a cardiac mass diagnosed by computed tomography (CT) angiography (Figure 1). It was heterogeneous, measuring 63 mm×43 mm, occupying almost the entire left atrium, causing obstruction of blood flow through the mitral valve and extending to the pericardium (Figure 2).

Laboratory tests showed normochromic normocytic anemia, elevated C-reactive protein (23.4 g/dl) and erythrocyte sedimentation rate (57 mm/h). The electrocardiogram revealed sinus rhythm, with nonspecific repolarization abnormalities. Thoraco-abdominal CT revealed no secondary lesions or adenopathy. Cardiac magnetic resonance imaging was contraindicated.

Partial surgical excision was performed. The tumor was friable and cartilaginous, composed of myxomatous tissue with stellate cells and mature cartilage with

foci of atypical cells and inflammatory infiltrate, without mitotic figures. The cells were vimentin positive and CD31, S100 protein and CD68 negative. The final diagnosis was cardiac chondromyxoma with atypical hypercellularity (Figure 3).

The patient was referred to the oncology clinic and maintained in follow-up. Two months later she was readmitted with dyspnea. The tumor had grown, with a left ventricular mass (59 mm×35 mm) protruding into the outflow tract causing obstruction (peak systolic gradient of 54 mmHg), plus a pericardial mass (Figure 4). The patient died suddenly one month later.

We report a case of a rare type of cardiac mass, with features of both myxoma and chondroma and an extremely malignant behavior. This may be because this variant had a malignant course or, in fact, was not a true myxoma.

Echocardiography and CT in conjunction with the pathological analysis were extremely helpful in establishing the final diagnosis.

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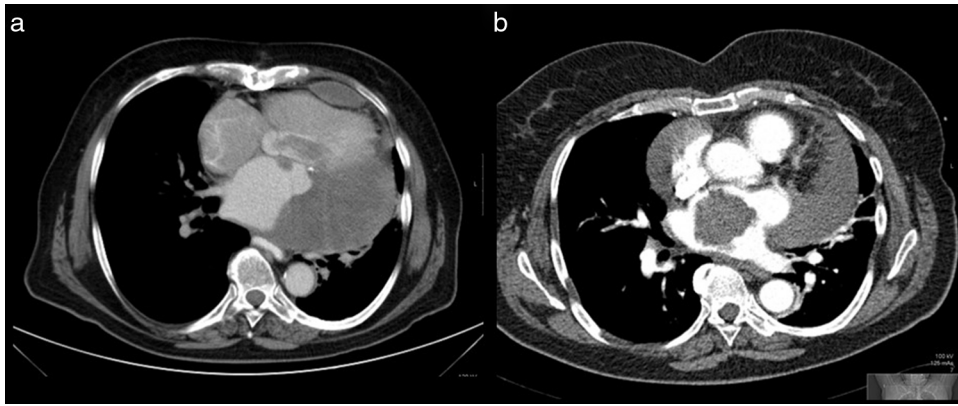


Figure 1 (a and b) Computed tomography angiography showing a heterogeneous mass occupying almost the entire left atrium, extending to the pericardium, and pericardial effusion.

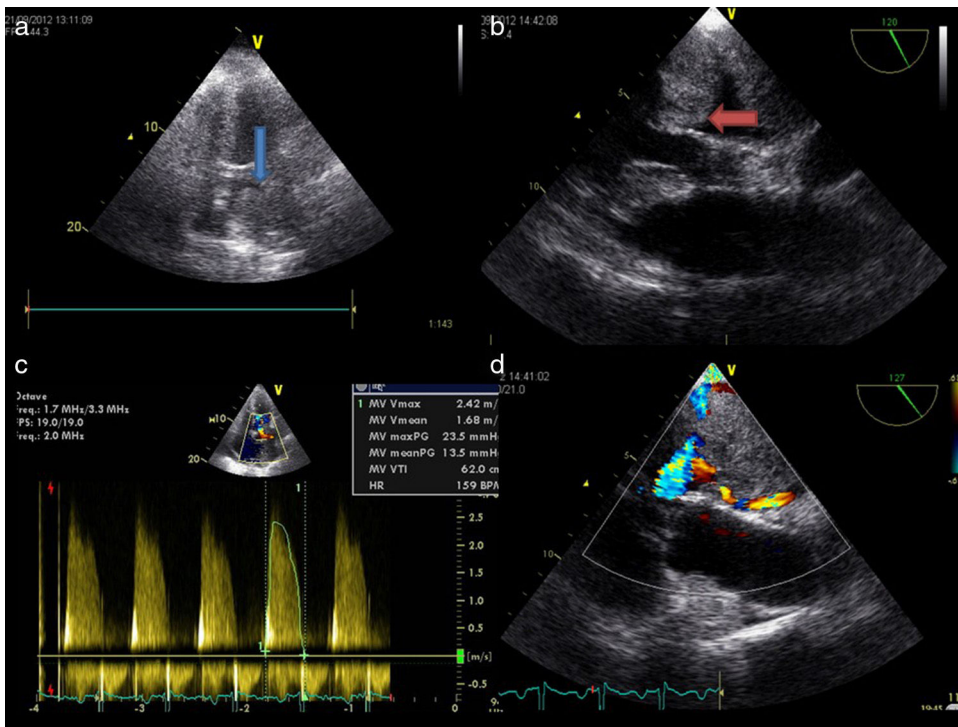


Figure 2 Transthoracic echocardiogram (4-chamber view) and transesophageal echocardiogram (120°) revealing a cardiac mass 63 mm×43 mm in size, occupying almost the entire left atrium (a and b), causing mitral valve obstruction (c) and flow acceleration within the left atrium (d).

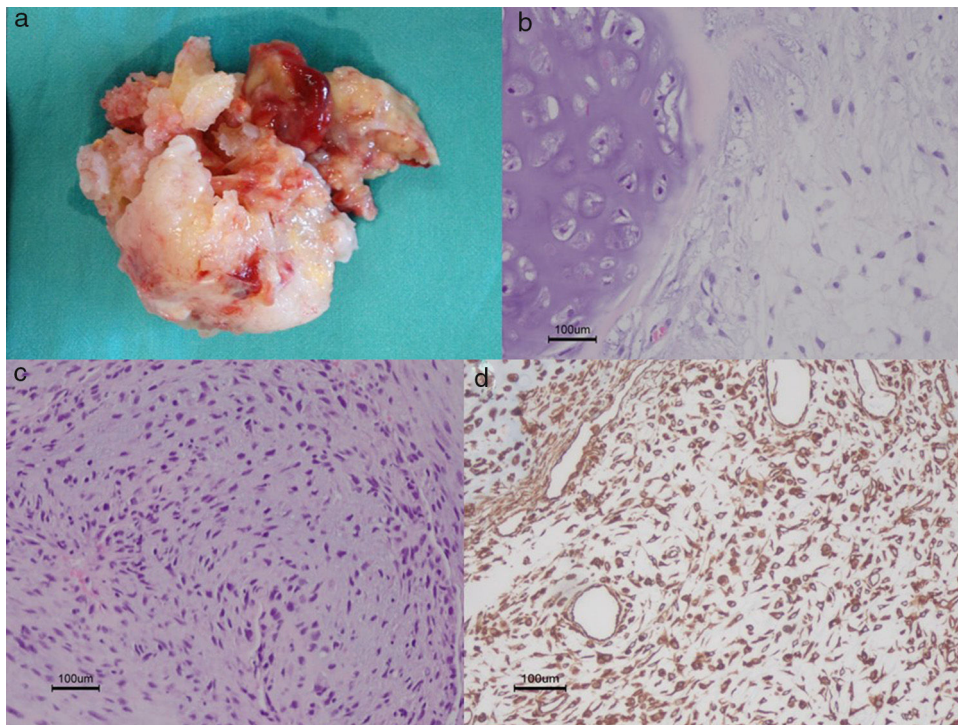


Figure 3 (a) Part of the heterogeneous irregular excised mass (5 cm×3 cm); (b) predominant pattern consisting of myxochondromatous tissue, mimicking common myocardial myxoma and mature lobular cartilage (H&E ×200); (c) intermingled in the myxoma pattern, highly proliferative areas consisting of fusiform and polygonal eosinophilic cells with nuclear atypia (H&E ×200); (d) atypical cells expressing cytoplasmic vimentin and immunonegative for CD3, S100 protein and CD68 (vimentin ×100).

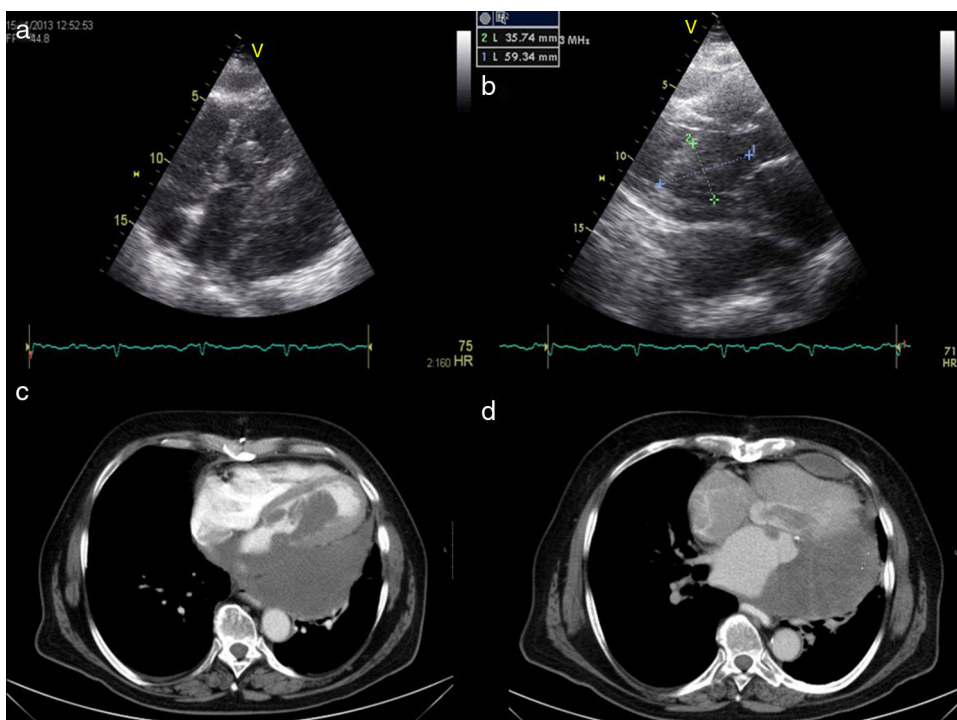


Figure 4 (a and b) Transthoracic echocardiogram (modified 4-chamber view) showing a left intraventricular mass measuring 59 mm×35 mm protruding into the left ventricular outflow tract, extending to the pericardium and infiltrating the left ventricular wall; (c and d) computed tomography angiography showing an intracardiac mass occupying the entire left atrium and part of the left ventricle, extending to the pericardium and compressing the inferior vena cava.

Ethical disclosures

Protection of human and animal subjects. The authors declare that no experiments were performed on humans or animals for this study.

Confidentiality of data. The authors declare that they have followed the protocols of their work center on the publication of patient data.

Right to privacy and informed consent. The authors declare that no patient data appear in this article.

Conflicts of interest

The authors have no conflicts of interest to declare.

Appendix A. Supplementary material

Supplementary material associated with this article can be found in the online version at [doi:10.1016/j.repc.2015.11.032](https://doi.org/10.1016/j.repc.2015.11.032).