





Myxoma as a rare cause of shortness of breath

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Introduction: Dyspnea and chest pain are common symptoms affecting 25% patients in ambulatory setting and can be caused by many underlying conditions which can sometimes present a clinical challenge. Symptoms associated with cardiac myxomas are typically because of the tumor mass obstructing a normal blood flow within the chambers of the heart. More than 75% of myxomas originate in the left atrium either at the mitral annulus or the fossa ovalis border of the interatrial septum; 20% arise from the right atrium while 5% stem from both atria and the ventricle. Atrial myxomas are usually associated with a triad of complications, including obstruction, emboli, and constitutional symptoms.¹⁻³

Case report: 44-year-old woman was referred for a cardiology examination due to persistent shortness of breath and progressive intolerance on physical exertion over the past 3 years with everyday chest discomfort for the past few months. Her past medical and family history are unremarkable, reporting only the tendency to anxiety and panic attacks. Occasionally she felt palpitations, but earlier electrocardiographic findings corresponded to sinus tachycardia. Physical examination revealed normal vital signs and a systolic murmur in her left axillary line. Laboratory findings showed an elevated heart failure marker (NT-proBNP 359 ng/L). Echocardiography revealed a dilated left atrium (LAVI 59 ml/m²) almost filled with a tumor mass (58 x 53 mm) attached by a stalk to the interatrial septum (**Figure 1**). During diastole the tumor was pushed into the left ventricle through the mitral valve creating high transmitral flows causing a functional stenosis. Other cavities were of regular dimensions and function with no described indirect signs of pulmonary hypertension. MSCT coronary angiography finding was normal as well as color doppler of the carotid and vertebral basin. A median sternotomy was performed, and the tumor was completely removed. The pathohistological finding of the extirpated mass corresponded to myxoma and immunohistochemically the tumor cells were positive for calretinin. Postoperative care was eventless. In further outpatient follow-ups, she was subjectively symptom-free with an excellent recovery of functional status and echocardiography showed no signs of disease relapse (**Figure 2**).

Conclusion: Primary cardiac tumors are extremely rare and usually benign. Most common are myxomas and they usually appear between the fourth and seventh decades of life. Approximately 20% are asymptomatic but can cause all kind of symptoms such as shortness of breath, chest pain, arrhythmias, syncope, fever, malaise, weight loss or can be the cause of a sudden death. Upon diagnosis, surgical

resection is typically indicated and the gold standard method for confirming the diagnosis of myxoma is pathology. The best method for detection is echocardiography which is widely available, noninvasive and it allows a quick and sufficiently accurate evaluation of the morphology, involvement of valve leaflets, and functional obstruction of the LV outflow tract. Myxomas have been reported to grow at a rate of 0.15 - 2 cm each month so surgical excision should be performed as soon as the diagnosis is confirmed.

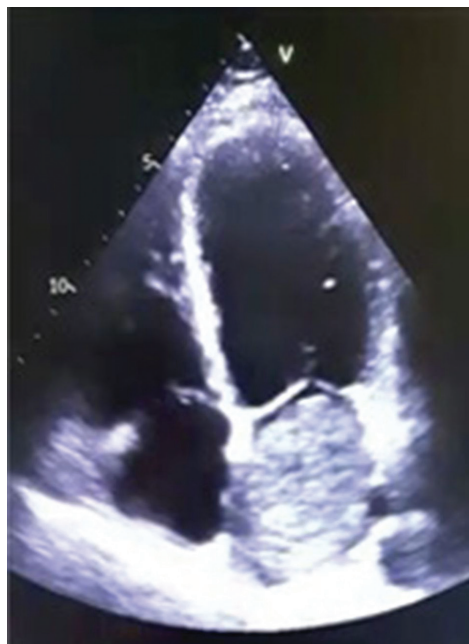


FIGURE 1. Myxoma filling the left atrium (preoperatively).

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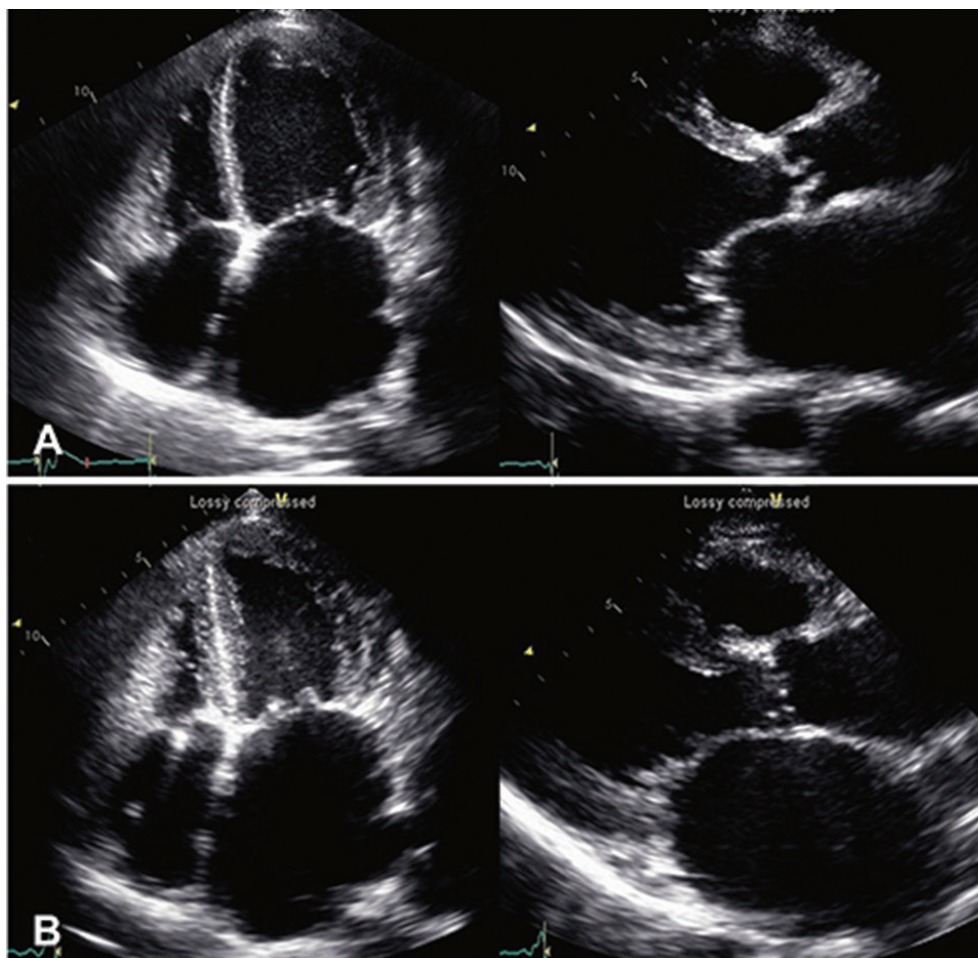


FIGURE 2. Postoperatively image without visible myxoma.

LITERATURE

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