

# New-onset heart failure symptoms caused by obstructive left atrial myxoma in a patient with a history of cryptogenic stroke two decades ago: a case report

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**Introduction:** Primary cardiac tumors are rare, with an incidence estimated to be approximately 100 times lower than that of secondary tumors<sup>1</sup>. Autopsy studies have indicated a prevalence of primary cardiac tumors ranging from 0.001% to 0.03%<sup>1</sup>. Myxomas are the most common type of primary cardiac tumor, accounting for 50-70% of cases<sup>2</sup>. Among myxomas, left atrial myxomas are the most frequent subtype, constituting about 75% of cases<sup>2</sup>. Although myxomas can occur in people of all ages and genders, they are more prevalent in women and typically arise in adults aged between 30 and 60 years.<sup>1</sup> While the majority of myxomas occur sporadically (90%), some may be associated with genetic syndromes such as Carney complex or familial myxomatous syndrome<sup>1</sup>. Left atrial myxomas can cause various adverse outcomes due to multiple pathophysiological mechanisms. These include inducing intracardiac obstruction leading to symptoms of dyspnea, fatigue, and angina, embolization resulting in cerebral, limb, or organ ischemia, disrupting normal cardiac electrophysiology leading to arrhythmias, and inducing heart failure<sup>1,2</sup>.

**Case report:** We present a case of a 49-year-old woman who was referred for an echocardiographic examination due to newly developed symptoms of NYHA class II-III heart failure. The patient had a previous medical history of a stroke at the age of 32, and there is no documented medical evidence of a transthoracic echocardiogram or transesophageal echocardiogram being performed during the initial evaluation to assess for possible cardiac sources of embolism. She was discharged with a diagnosis of antiphospholipid syndrome and was on warfarin therapy for the next six years. However, this diagnosis was later excluded, and oral anticoagulant therapy was discontinued. Transthoracic echocardiography revealed a tumor mass within the left atrium, fixed to the interatrial septum, measuring approximately 2x4 cm (Figure 1). The mass dynamically moved and prolapsed into the left ventricle during diastole, causing obstruction of the mitral valve with hemodynamic parameters resembling severe mitral stenosis (peak gradient 20 mmHg, mean gradient 14 mmHg) and resulting in moderate pulmonary hypertension (pulmonary artery pressure around 60 mmHg). A cardiac surgical procedure was subsequently performed, during which the tumor mass was completely excised. The pathology report described the tumor as a myxoma.



FIGURE 1. Visualization of a left atrium myxoma from the long parasternal axis view.

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## LITERATURE

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