



Images In Medicine

Left Atrial Myxoma Presenting With Cerebral Embolism

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A 48-YEAR-OLD MAN WITH A HISTORY OF HYPERTENSION PRESENTED TO the emergency department with acute onset of left-sided weakness and dysarthria. Computed tomography scan of the head revealed a right middle cerebral artery infarct as well as a hyperdensity seen within the right middle cerebral artery and its branches consistent with clot. Subsequent **transthoracic echocardiography (TTE)** revealed a large (approximately 11 cm²), mobile mass attached to the distal left atrial septum which prolapsed across the mitral valve (Figure 1) resulting in partial obstruction of left ventricular inflow (Figure 2). This mass was consistent with an atrial myxoma and was presumed to be the etiology of his stroke.

Primary tumors of the heart are rare, with reported incidence at autopsy ranging between 0.002% to 0.3%.¹ Often times these tumors are recognized incidentally through an imaging study performed for an unrelated symptom or condition. Clinical presentation of cardiac tumors is varied and includes signs and symptoms of intracardiac obstruction such as pulmonary venous congestion, presyncope, or syncope, signs of systemic embolization such as seen in this patient, or constitutional symptoms such as fever, fatigue, or weight loss.²

Most primary cardiac tumors are benign, with the most common pathologic subtype being the myxoma. The vast majority of myxomas are found in the left atrium, where they may result in obstruction of blood flow across the mitral valve or mitral regurgitation.

It is estimated that approximately 15% of ischemic cerebrovascular accidents are cardioembolic in origin.³ TTE provides a non-invasive, widely available, and highly sensitive modality for the initial evaluation of a suspected atrial myxoma. Furthermore, TTE is useful in evaluating the hemodynamic consequences of myxomas as a result of obstruction to left atrial emptying. When more detailed information is needed, cardiac magnetic resonance imaging or computed tomography can be utilized.

REFERENCES

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Disclosure of Financial Interests

The authors and/or their spouses/significant others have no financial interests to disclose.



Figure 1. Transthoracic echocardiogram in the left parasternal long axis view showing an approximately 11 cm² left atrial mass (outlined) attached to the distal atrial septum consistent with myxoma.

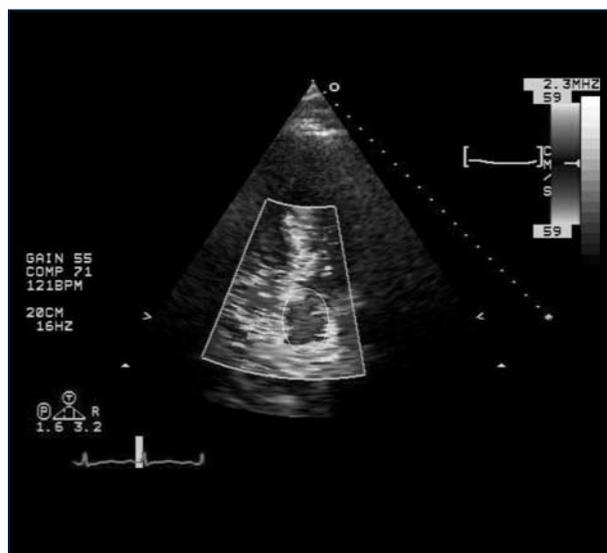


Figure 2. Transthoracic echocardiogram in a limited apical view showing color flow acceleration around the left atrial myxoma (outlined) suggesting obstruction to left ventricular inflow.

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