

## Atrial Myxoma: Ultrasound

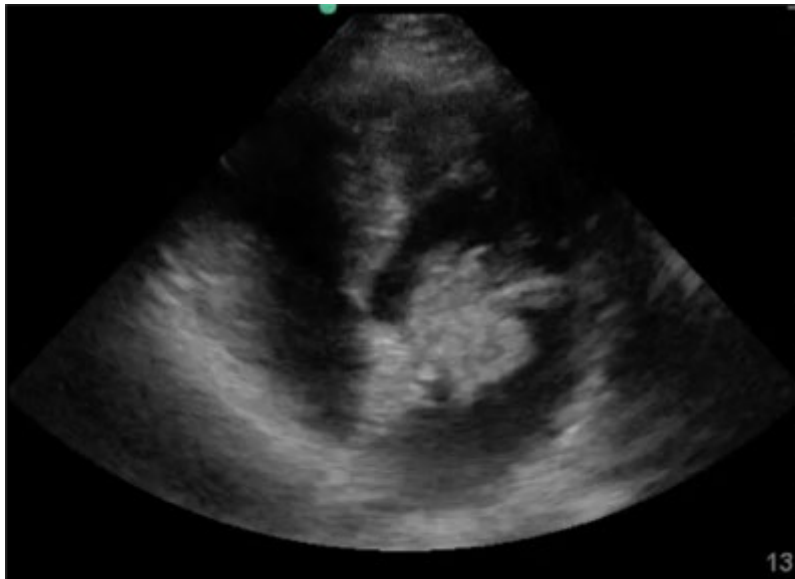
Alisa Wray, MD\*

\*University of California, Irvine, Department of Emergency Medicine, Orange, CA

Correspondence should be addressed to Alisa Wray, MD at [awray@uci.edu](mailto:awray@uci.edu)

Submitted: April 23, 2016; Accepted: June 4, 2016; Electronically Published: July 15, 2016; <https://doi.org/10.21980/J87P45>

Copyright: © 2016 Wray. This is an open access article distributed in accordance with the terms of the Creative Commons Attribution (CC BY 4.0) License. See: <http://creativecommons.org/licenses/by/4.0/>



Video Link: <https://youtu.be/t5n-p2RhM08>

**History of present illness:** A 52-year-old female presented to the emergency department with lightheadedness and shortness of breath, which had gradually progressed over several months. She denied chest pain. Her only medical history was an atrial myxoma that had been previously removed. Her exam was notable for a “popping” noise heard on cardiac auscultation.

**Significant findings:** Bedside ultrasound revealed the presence of a left atrial mass that appeared to be tethered to the mitral valve. The mass was best viewed on ultrasound in the apical four-chamber window with the phased array probe placed over the patients’ point of maximal impact (PMI), with the patient in left lateral decubitus position.

**Discussion:** Primary cardiac tumors are rare, estimated to have an incidence of 0.0017 and 0.19 percent.<sup>1</sup> Approximately three quarters of primary cardiac tumors are benign, and nearly half of these are myxomas. Myxomas can occur in all age groups, however they are more prominent in the third to sixth decades of life.

Approximately 75% originate in the left atrium, with the remaining 25% originating in the right atrium and the interatrial septum. Patients' symptoms are directly related to the size and position of the myxoma. In cases of small tumors, patients may be asymptomatic, while larger tumors may embolize causing cerebral vascular accidents, vision loss. Severe cases of embolized left ventricular myxomas can cause complete occlusion of the abdominal aorta. Myxomas can also cause intracardiac obstruction, leading to shortness of breath, heart failure, syncope, or more generalized symptoms such as fatigue, fevers, and weight loss. Surgical excision is the treatment of choice. While computed tomography (CT) and magnetic resonance imaging (MRI) may aid in diagnosis, transesophageal echocardiogram (TEE) remains the standard for diagnosis of atrial myxomas, with one study showing a sensitivity of 94% and specificity of 100%.<sup>2</sup>

**Topics:** Atrial myxoma, cardiac mass, ultrasound, cardiac ultrasound, cards, cardiology, cardiac tumors, chest pain, valve disorders, emergency medicine.

**References:**

1. Reynen K. Cardiac myxomas. *N Engl J Med.* 1995;333(24):1610-1617. doi: 10.1056/NEJM199512143332407
2. Goldman JH, Foster E. Transesophageal echocardiographic (TEE) evaluation of intracardiac and pericardial masses. *Cardiol Clin.* 2000;18(4):849-60.