Answer: b) Cardiac myxoma

Discussion

Given the size and mobility of the mass, the patient underwent surgical excision; pathologic examination with hematoxylin and eosin staining confirmed the diagnosis of a left atrial myxoma. Atrial myxomas are rare but considered the most common primary cardiac tumor in all age groups. Papillary fibroelastomas are the third most common benign cardiac tumor (behind myxomas and lipomas); however, these typically appear as small masses attached to a valve and resemble a vegetation.

Cardiac myxomas are frequently located in the left atrium and arise from the atrial septum. About 10% have other sites of origin such as the posterior wall, anterior wall, and the appendages. Symptoms, such as platypnea (shortness of breath relieved with supine position), can occur due to pulmonary congestion when the tumor interferes with valvular function. Additional symptoms can be attributed to systemic emboli due to tumor fragmentation. A diastolic “plop” on auscultation may be explained by mass obstruction of the mitral orifice in relation to high velocity flow. It is important to note that a normal erythrocyte sedimentation rate can be seen in 25% of patients with cardiac myxomas and therefore, a normal level does not rule out this diagnosis. Although most patients have a good recovery following surgical resection, post-operative arrhythmias are very common. The modified Maze procedure can significantly reduce the occurrence of post-operative arrhythmias, thus decreasing the need for pacemaker placement following surgical procedures involving the atrial septum. Annual echocardiography following surgical resection is warranted to evaluate for recurrence, which is seen in about 5% of patients.

Figure Legends

Figure 1: Left atrial myxoma prolapsing through the mitral valve causing functional mitral stenosis.

Figure 2: Left atrial myxoma attached to inter-atrial septum with moderate to severe mitral regurgitation.

Figure 3: Excised gross specimen measuring 5.2 cm x 3.4 cm x 2.5 cm.
References


Author Biographies

Sophia MyTrang Nguyen is a resident in the Department of Medicine at California Pacific Medical Center (CPMC) in San Francisco, California. She attended medical school at the University of Colorado at Denver.

Shalini Bhambani-Lal is a fellow in the Department of Cardiology at California Pacific Medical Center in San Francisco, California. She attended Harvard Medical School and completed her Internal Medicine Residency at the University of Southern California.

Randall Edson is the Program Director for the Internal Medicine residency program at CPMC. He completed his Internal Medicine Residency and Infectious Disease Fellowship at the Mayo School of Graduate Medical Education and served as Infectious Disease Fellowship Director and Associate Program Director of the Internal Medicine Residency Program for 25 years before becoming Program Director at CPMC.