

Left Atrial Myxoma Causing Ping-Pong Mitral Stenosis

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Clinical Image

A 35-years-old female presented to us for evaluation of a recent episode of syncope. She also complained of exertional breathlessness for past 6 months. She denied experiencing orthopnea, paroxysmal nocturnal dyspnea, fever, weight loss and chest pain. At presentation, her vitals were stable (pulse=78/min and regular, BP=120/78 mm Hg). Cardiac auscultation revealed a mild diastolic murmur at the apex raising possibility of mitral stenosis. On transthoracic echocardiogram, a large (45 mm × 25 mm) mobile, irregular mass was seen in the left atrium (Figure 1). This mass was hetero-echoic in echotexture and was attached to the inter-atrial septum in the region of fossa ovalis. All these findings were suggestive of the diagnosis of atrial myxoma. It was prolapsing into the left ventricle during diastole (Figure 2). Colour Doppler revealed increased velocity of blood flow across the mitral valve. On continuous-wave Doppler, peak and mean gradients across mitral valve were 18 mm Hg and 8 mm Hg respectively. However mitral valve was normal in morphology with normal sub-valvular apparatus. All other cardiac valves and chambers were also normal. Patient underwent complete surgical excision of the cardiac mass. Histopathology confirmed it to be a myxoma.

Myxoma is the most frequent primary cardiac tumour accounting for 80% of all cases [1]. It may originate in any heart chamber, most commonly in the left atrium (75%) followed by right atrium (23%) and ventricles (2%) [2]. Myxoma can be easily misdiagnosed and is initially suspected in only 5.7% of patients [3]. Depending on the location of myxoma and its association with the heart structures, it can cause clinical manifestations, which include obstructive, embolic and constitutional symptoms [4]. Left atrial myxoma, especially if mobile and large, may result in symptoms similar to mitral stenosis due to obstruction of blood flow across the mitral valve. These symptoms include exertional dyspnea, paroxysmal nocturnal dyspnea, orthopnea, fatigue, and syncope [3]. In conclusion, left atrial myxoma should always be considered in the differential diagnosis in patients with

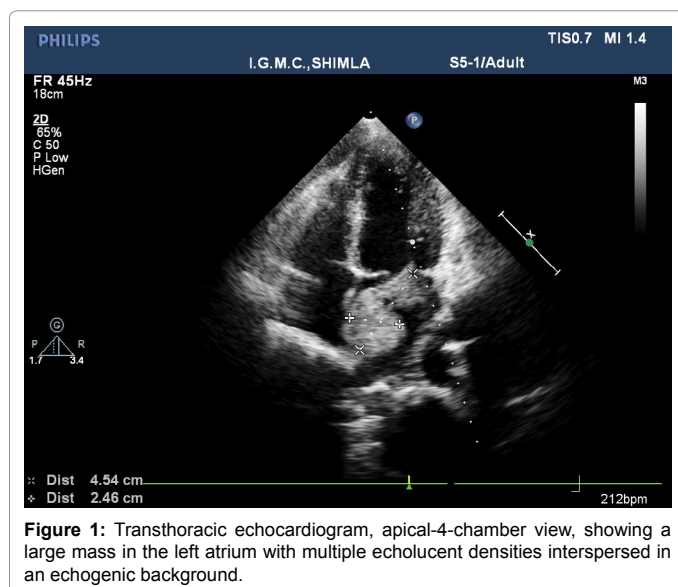


Figure 1: Transthoracic echocardiogram, apical-4-chamber view, showing a large mass in the left atrium with multiple echolucent densities interspersed in an echogenic background.

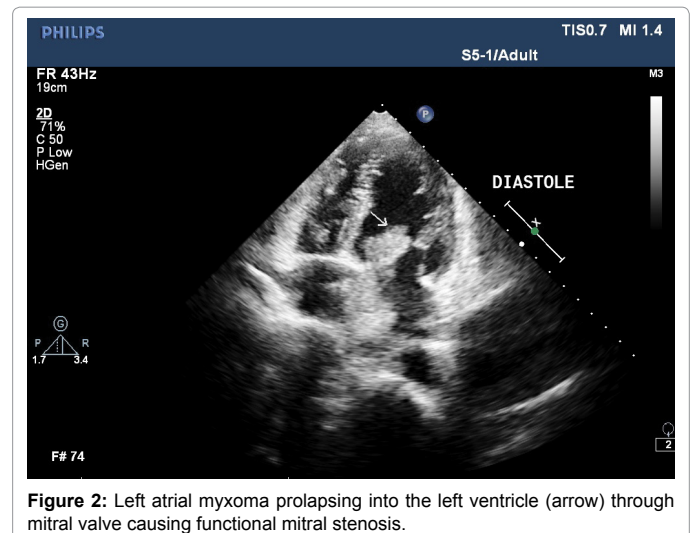


Figure 2: Left atrial myxoma prolapsing into the left ventricle (arrow) through mitral valve causing functional mitral stenosis.

suspected mitral valve disease. Echocardiography should be performed as early as possible to establish a prompt diagnosis and management.

Patient Consent

Obtained.

Competing interest

None.

Acknowledgement

None.

Contributorship statement

KM made the diagnosis. SS, SR, NG and SaR performed the investigations and were involved in the management of the patient. KM wrote the manuscript and performed the literature search. All authors read and approved the final version of the manuscript.

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