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Hammer in the Heart on Coronary Angiography

NARESH MONIGARI[1], ROHITH POONDRU[2], HASHIR KAREEM[3], TOM DEVASIA[4]

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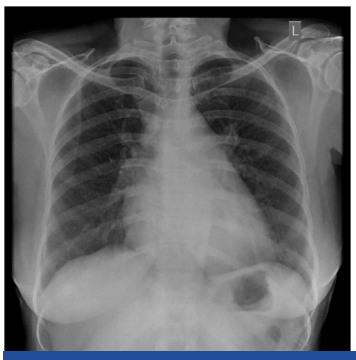
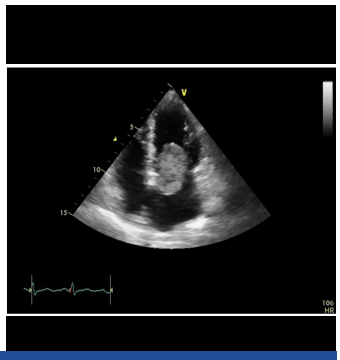
Here we report a 51-year-old female who presented for evaluation of dyspnoea on exertion and frequent palpitations since 1 month. Patient was diabetic and hypertensive and was on regular treatment. There was no history of fever, cough or pedal oedema. On general examination she had tachycardia, tachypnea and hypoxia on room air. Systemic examination showed grade 3 left parasternal heave and mid diastolic murmur at apex, additional sound (opening snap/tumour plop) was heard but was not able to be differentiated clinically. Chest roentenogram showed straightening of left heart border [Table/Fig-1].

Electrocardiogram showed atrial fibrillation, so possibility of mitral stenosis was considered. Trans thoracic echocardiogram (TTE) showed large (4*2.4 cm) left atrial mass found attached to inter atrial septum with cyst within prolapsing in and out of left ventricle causing dynamic mitral valve obstruction [Table/Fig-2] and [video-1] there was associated eccentric mitral regurgitation and severe pulmonary artery hypertension. Transoesophangeal echocardiography (TEE) showed the same findings. On coronary angiography LV myxoma was moving in and out of the LV simulating to and fro motion of hammer on left anterior oblique cranial view [video-2,3].





[Table/Fig-1]: Chest roentgenogram PA view showing straightening of left heart border. **[Table/Fig-2]:** Tran's thoracic echocardiography apical four chamber view showing left atrial mass prolapsing into left ventricle.

To the best of our knowledge, description of left atrial myxoma movement micmicking hammer in the heart was not reported previously. A study done by Vincelj J on 14 patients with atrial mass showed that TEE had 100% sensitivity and specificity in detecting them [1]. So diagnosis can be suspected by TTE and confirmed with TEE. Primary cardiac tumours are rare, 75% of them are benign and most of them are constituted by myxomas [2].

Myxomas occur most frequently in left atrium (93.5%) than in other regions [3]. Our patient had myxoma arising from inter atrial septum which is commonly seen. Once the suspicion of myxoma arises diagnosis can be made by TTE or TEE. Early diagnosis is required as it is not uncommon to see patients with signs of systemic embolisation as presenting symptom. Diagnosis of myxoma makes cause treatable and surgery is the treatment of choice with most series reporting an operative death rate of fewer than 5% [4]. As prognosis is good this possibility should always be suspected and ruled out with appropriate investigations. Our patient underwent successful resection and histopathology was consistent with myxoma. Post excision patient was symptomatically better and undergoing cardiac rehabilitation.

REFERENCES

[1] Vincelj J, Sutlic Z, Biocina B, et al. Diagnostic accuracy of Tran esophageal echocardiography for detection of atrial mass. *Acta Med Croatica*. 2001;55(1):47-51.
[2] Cetin M, Cakici M, Ercisli M, et al. Unusually located left ventricular Outflow myxoma: a brief review of the literature. *BMJ Case Rep*. 2013;2013.
[3] Yu K, Liu Y, Wang H, et al. Epidemiological and pathological characteristics ofCardiac tumours: a clinical study of 242 cases. *Interact Cardiovasc Thorac Surg.* 2007;6(5):636-39.
[4] Rahmanian PB, Castillo JG, Sanz J, et al. Cardiac myxoma: preoperative diagnosis using a multimodal imaging approach and surgical outcome in a large Contemporary series. *Interact CardiovascThorac Surg*. 2007;6(4):479-83.

PARTICULARS OF CONTRIBUTORS:
1. Senior Resident, Department of General Medicine, Chalmeda Anand Rao Institute of Medical Sciences, Telangana, India.
2. Senior Resident, Department of Cardiology, Kasturba Medical College, Manipal, India.
3. Assistant Professor, Department of Cardiology, Kasturba Medical College, Manipal, India.
4. Professor and Head of Unit, Department of Cardiology, Kasturba Medical College, Manipal, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:
Dr. Naresh Monigari,
Lifeline Hospital, Opp District Court, Karimnagar, Telangana-505001, India.
E-mail : medico.ktya@gmail.com

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