

**Case Report****Rheumatic Mitral Stenosis With Left Atrial Myxoma**

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**ABSTRACT**

A 28 year old woman with exertional dyspnoea and clinical diagnosis of rheumatic mitral stenosis (MS) underwent echocardiographic examination. She had severe mitral stenosis with pulmonary hypertension (PH). An unexpected mass lesion was noticed in the dilated left atrium (LA) attached to interatrial septum in fossa ovalis region.

**Key words :** Mitral stenosis, Left atrial mass, Myxoma.

**Introduction -**

Myxoma is the most frequent cardiac tumor. It usually originates from the fossa ovalis region in Left atrium (LA). (75%) but may arise from other locations as well. These tumours are attached to the endocardium by a broad base and are usually pedunculated, polypoid and friable. They appear as soft gelatinous, mucoid, usually grey white mass, often with areas of haemorrhage or thrombosis<sup>1</sup>. LA thrombus is relatively common in MS with a frequency of 10-25%<sup>2</sup>. The association of LA myxoma and rheumatic MS is an extremely rare condition and very few cases have been reported<sup>3-6</sup>. A case of rheumatic MS with LA myxoma is reported here.

**Case Report -**

A 28 year old woman presented with exertional dyspnoea from 3 years. She gave history of migratory polyarthritis at the age of 10. She had no history of haemoptysis, oedema feet, episodes of paroxysmal nocturnal dyspnoea, change in voice, neurological deficit, fever, hematuria or leg pain in past. She was receiving monthly injection for rheumatic prophylaxis. On clinical examination her pulse rate was 72/min, regular and B.P. of 100/70 mmHg. She had signs of severe mitral stenosis with

pulmonary hypertension and no signs of cardiac decompensation. ECG revealed sinus rhythm with evidence of left atrial and right ventricular hypertrophy (RVH). Radiological examination of chest revealed moderate cardiomegaly, mitralisation of heart, double contour sign and evidence of PH. Two D echocardiographic examination revealed evidence of severe mitral stenosis (MVA-0.88 Sq.cm by PHT) with PH (PAP 80 mmHg by TR flow). LA and RV were enlarged. LV function was normal. Aortic valve was thickened without significant obstruction. Other valves were normal. A large mass of size, 48.6 mm X 54.8 mm was noticed in LA attached to interatrial septum (IAS) with echocardiographic features of myxoma. Left atrial appendage (LAA) was found to be empty. Presumptive diagnosis of myxoma was kept due to attachment of the mass to IAS near fossa ovalis, variable echogenicity and empty LAA. Patient was referred to higher centre for surgical treatment.

**Discussion -**

Rheumatic MS is one of the most common acquired heart diseases worldwide and is usually diagnosed by physical examination. Echocardiography is the method of choice for assessment of its severity and pre operative evaluation. LA thrombus is relatively common in MS<sup>2</sup>. It is most often located in LAA, but is occasionally attached to the IAS and may mimic a myxoma, which is a rare condition. A small myxoma cannot be diagnosed clinically but a larger myxoma can prolapse in to mitral orifice and be misinterpreted for MS<sup>1</sup>. Echocardiography is the principle method to diagnose an intracavitary mass lesion<sup>1,7,8</sup> but the echocardiographic features of a

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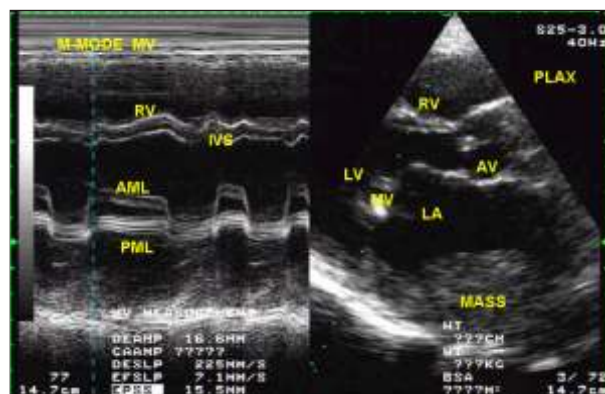
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thrombus and myxoma can be similar. Association of La myxoma and MS is extremely rare and very few cases have been reported<sup>36</sup>. Coexisting LA thrombus and myxoma have also been reported in MS<sup>5</sup>. It should be emphasized that the diagnosis of myxoma, based on clinical features, anatomic location, and echocardiographic appearance of the tumour is only presumptive until confirmed histologically<sup>9</sup>.

### References :

- Hall RJ, Cooley DA, McAllister HA, et al. Neoplastic heart disease. Hurst's The Heart; 2001 : 2179-2195.
- Pytlewski G, Panidis IP; omba W; et al. Resolution of left atrial thrombus with warfarin by transesophageal echocardiography before percutaneous commissurotomy in Mitral stenosis. Am Heart J.1994; 128 : 843-845.
- Seagle RL; Nomeir AM; Watts LE. Left atrial myxoma associated with rheumatic mitral stenosis. Clin Cardiol. 1984; 7 (6) : 370-372.
- Casale L; Goodman D; Buchblinder M. et al. Left atrial myxoma in a patient with rheumatic mitral stenosis, implication for balloon valvuloplasty. Am Heart J.1991; 122 (5) : 1474-1475.
- Sim EK; Lim YT; Ng WL et al. Co existing left atrial thrombus and myxoma in mitral stenosis - a diagnostic challenge. Singapore Medical J.1999; 40 (1) : 46-47.
- Khania M and Hekmat M. Eur J Echocardiogr. 2003; 4(3) : 229-231.
- Ha JW; Kang WC; Chung N et al. Echocardiographic and morphologic characteristics of left atrial myxoma and their relationship to systemic embolization, Am J Cardiol.1999; 83 (Suppl A8) : 1579-1582.
- Tigh DA; Rousou JA; Kenia s et al. Transesophageal echocardiography in the management of mitral valve myxoma. Am Heart J.1995; 130 : 627-629.
- Otto CM. Cardiac Masses and Potential Cardiac "Source Of Embolism". Textbook of Clinical Echocardiography, 3rd Edition. Elsevier Saunders; 2004 : 414.

### Illustrations -



*Fig. 1 : M-mode and 2D Echo (PLAX view) showing features of MS. Note the mass in LA.*



*Fig. 2 : 2D Echo (PSX view) showing mass in LA attached to IAS.*