Case Report

ATYPICAL LEFT ATRIAL MYXOMA IN AN INTRAVENOUS DRUG ABUSER AND HIV POSITIVE PATIENT

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ABSTRACT: We report a relatively young, male patient who was intravenous drug abuser and presented with persisting fever and no other symptom pointing to heart disease. He was found HIV positive and had a left atrial myxoma at unusual site. Myxoma was excised and his fever settled.

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INTRODUCTION:

Overall prevalence of Primary heart tumors is quite low (0.001% to 0.03% in autopsy series) and most common among them is myxoma (30-50%).[1] Myxomas affect women more frequently (65%) and may be familial in up to 10% of cases.[2] A mutation of chromosome 17 (17q24) in protein kinase A type I-A has been reported to be responsible for Carney complex, a familial entity with cardiac myxomas as its part.[3]

Myxomas may occur in any cardiac chamber but most common site (83%) is left atrium (LA).[2] Patients with cardiac myxoma may present with one or more effects of a triad of constitutional, embolic, and obstructive manifestations. When embolic and obstructive manifestations are absent, diagnosis is usually difficult and delayed. We report a patient who had constitutional features (fever, malaise,) as prominent complaints with consequent late diagnosis and therapy.

CASE REPORT:

A 30 years old, married man having history of smoking and intravenous drug abuse for one year presented in Emergency Room of Punjab Institute of Cardiology, Lahore with complaints of fever, malaise and breathlessness on exertion of weeks duration. He got treatment from a District Head Quarter Hospital for two week that included oral and IV antibiotics but he did not respond. He was then referred for further work up and definitive therapy. His clinical examination was unrevealing except for pyrexia and laboratory data including complete blood count and biochemistry only showed a raised erythrocyte sedimentation rate (ESR), 70 mm in first hour. On blood cultures, no growth after 48 hours and 7days of incubation, both aerobically and anaerobically, was obtained.

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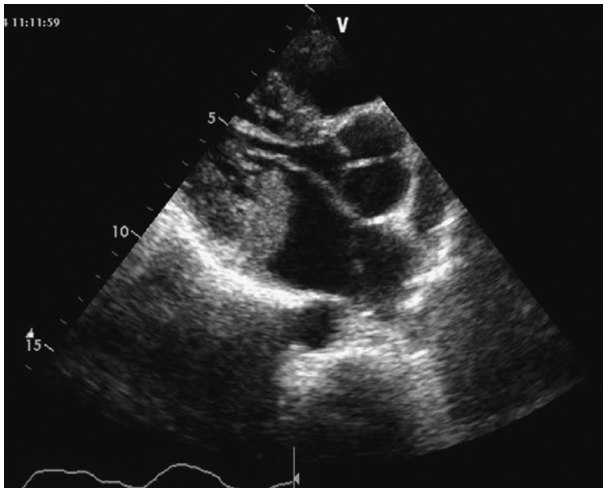
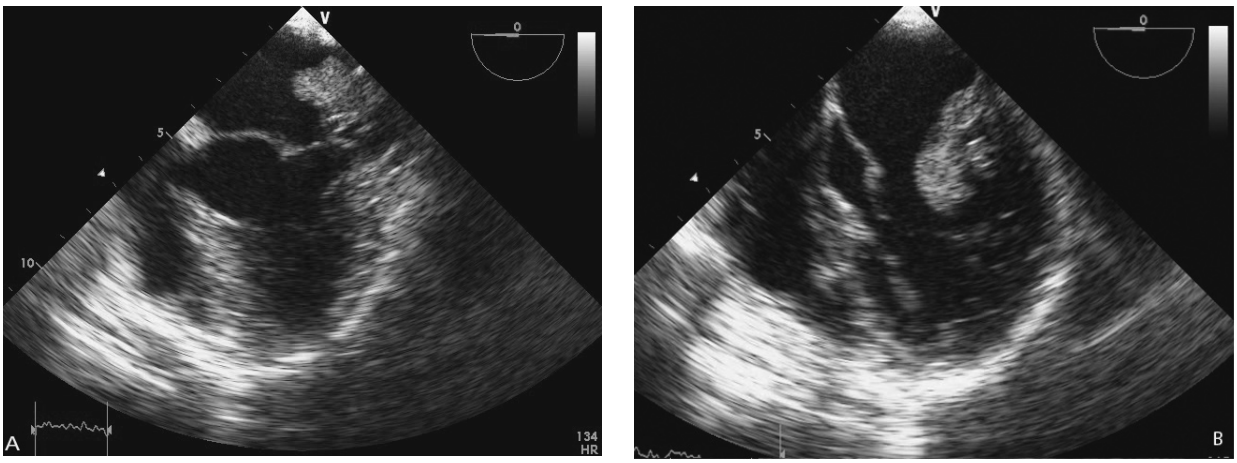
Figure 1: Parasternal long axis view (TTE) showing a mass in LA close to posterior mitral leaflet.



His blood tested positive for human immunodeficiency virus (HIV) with normal CD4 count and reversed CD4:CD8 ratio. CXR and ECG did not reveal any significant abnormality. Initially he was treated and managed as culture negative Infective Endocarditis. His fever persisted.

Transthoracic echocardiographic examination (TTE) showed a large mobile mass in LA. Its pedicle appeared to be attached to posterior wall of LA, near posterior mitral annulus but it was difficult to clearly define its attachment and comment whether it was attached to mitral leaflet on TTE (Figure 1). A trans-esophageal (TEE) examination was performed that clearly showed that mass was not attached to mitral valve and had minimal effect on valve function (Figure 2). This mass was surgically removed. Per-operative impression was a large mass that appeared to be vegetation attached at base of posterior mitral leaflet. His post operative course was uncomplicated, fever settled in few days and he was discharged with advice to have a follow-up TTE. Histopathology report revealed a tumor composed of sparse spindled with stellate

Figure 2: Long axis view (TEE) showing a mobile mass in LA protruding into LV. A- systole, B- diastole.



shaped cells resting against a myxoid background. Tumor cells lacked hyperchromasia, pleomorphism, nucleoli and mitotic activity. All these findings were consistent with a diagnosis of Myxoma.

DISCUSSION:

The commonest site of attachment of a myxoma in LA is fossa ovalis. [4,5] Cardiac myxomas involve heart valves only rarely and myxoma was in close proximity of mitral valve in our patient. Familial myxomatosis is notorious for atypical locations but our patient had no family history of such disease.[6] Another important finding in our patient was HIV positivity. HIV infection is well known to cause Kaposi's sarcoma and lymphoma but its role in causation of cardiac myxoma is not clear so far, though some cases have been reported in literature.[7] The most effective treatment of myxomas is surgical removal. After surgical resection, the recurrence rate is 1 to 3% for sporadic cases, 12% for familial disease and 22% for Carney's complex.[8]

REFERENCES

1.Burke A, Virmani R: Tumors of the Heart and Great Vessels. Atlas of Tumor Pathology. 3rd Series, Fascicle 16. Washington, DC, Armed Forces Institute of Pathology, 1996.

2.Kuon E, Kreplin M, Weiss W, et al. The challenge presented by right atrial myxoma. Herz 2004;29:702-9

3.Yin Z, Kirschner LS. The Carney complex gene PRKAR1A plays an essential role in cardiac development and myxomagenesis. Trends Cardiovasc Med 2009;19:44-9

4.Pinede L, Duhaut P, Loire R: Clinical presentation of left atrial cardiac myxoma. A series of 112 consecutive cases. Medicine (Baltimore) 2001; 80:159-172.

5. Ipek G, Erentug V, Bozbuga N, Polat A, Guler M, Kirali K, et al. Surgical management of cardiac myxoma. J Card Surg. 2005;20:300–4.

6.Yilmaz M. Unusually Large Left Atrial Myxoma Presenting With Severe Mitral Valve Obstruction Symptoms. Echocardiography. 2004;21:145–148. doi: 10.1111/j.0742-2822.2004.03089.x.

7.Shaw AJ, Mclean KA. Atrial myxoma and HIV infection. Sex Transm Infect. 2000; 76(2): 144. doi: 10.1136/sti.76.2.144

8.Schaff H. V., Mullany C. J. Surgery for cardiac myxomas. Semin Thorac Cardiovasc Surg, 2000; 12 : 77-88.