MOBILE BIATRIAL MYXOMA MIMICKING CARDIAC THROMBUS

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Abstract

Objective: Biatrial myxomas are extremely rare among the intracardiac masses. Because of the obstructive symptoms and risk of thromboembolic events, they should be surgically removed immediately. **Case:** We present a 47-year-old male patient who was treated successful surgery due to a mobile biatrial myxoma mimicking cardiac thrombus. The biatrial mass was successfully removed by classical open heart surgery. There were no complications. No recurrence was observed in the patient's two-year follow-up. **Conclusion:** The most important point we want to emphasize in this article is that rapid diagnosis and immediate removal of the mobile mass are vital in order to prevent systemic or pulmonary embolic events in these patients.

Keywords: Mobile intracardiac mass, biatrial myxoma, surgical remove, emergency surgery.

Özet

Giriş: Biatriyal miksomalar intrakardiyak kitleler arasında oldukça nadirdirler. Obstrüktif semptom oluşturmaları ve tromboemboli riskleri nedeniyle acilen cerrahi olarak çıkarılmalıdırlar. **Olgu:** Kardiyak trombüs benzeri mobil biatriyal miksoma nedeniyle başarılı cerrahi tedavi uygulanan 47 yaşındaki bir erkek hastayı sunuyoruz. Biatrial kitle klasik açık kalp cerrahisi ile başarılı bir şekilde çıkarıldı. Komplikasyon olmadı. Hastanın iki yıllık takibinde nüks gözlenmedi. **Sonuç:** Bu yazıda vurgulamak istediğimiz en önemli nokta, bu hastalarda sistemik veya pulmoner embolik olayları önlemek için tanının hızlıca konulması ve mobil kitlenin acil olarak çıkarılmasının hayati önem taşıdığıdır.

Anahtar Kelimeler: Mobil intrakardiyak kitle, biatriyal miksoma, cerrahi çıkarma, acil cerrahi

1. INTRODUCTION

Intracardiac myxoma is the most common benign tumor of the heart with an estimated incidence ranged from 8 to 150 per million annually and accounts for 30% to 50% of all primary tumors of the heart.[1,2] They most commonly originate in the left atrium (75%-80%) then in the right atrium (10%-20%). Biatrial myxoma is extremely rare (<%2,5).[2-4] We present a case of mobile biatrial myxoma mimicking cardiac thrombus who treated successful surgery.

2. CASE

A 47-year-old male patient, working as a manager in a factory, applied to our hospital with complaints of palpitations and chest pain for a week. He had no history of heart disease. On physical examination, heart rate was 96 beats/min and blood pressure was 116/75 mmHg. Heart sounds were normal on auscultation, and no systolic or diastolic murmur was detected. Electrocardiography was in normal sinus rhythm. On telegraphy, the cardiothoracic ratio was normal, and there were no pathological findings in the thorax and lungs. Laboratory analyzes were normal Transthoracic echocardiography revealed an irregular homogeneous mass of approximately 19x16 mm in the left atrium originating from the left side of the interatrial septum (IAS) and connected to the IAS by a stem.

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Another similar echogenic mass of approximately 19 x 32 mm in the right atrium was adhered to the right side of the IAS (Fig. 1). The right mass floated like a wing during the cardiac cycle and extended into the atrioventricular valve during diastole. We determined that the biatrial mass was connected via the fossa ovalis.

Figure 1: Transthoracic echocardiographic image of biatrial mass. Left and right faces arrows show the mass and its appendage in the left and right atrium (RV: Right ventricle).

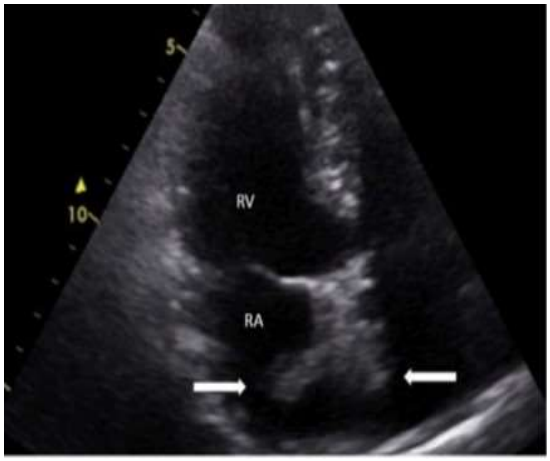
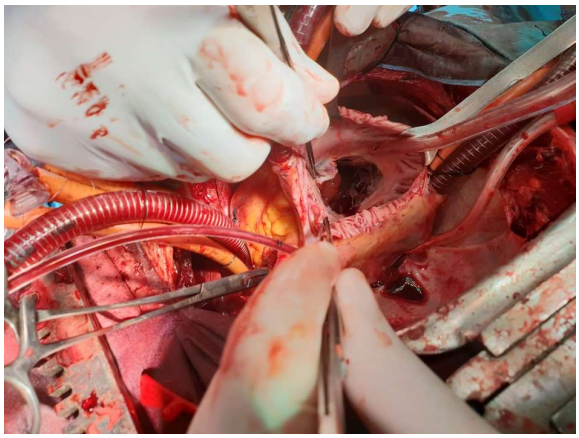


Figure 2: Operation image of the mass into the right atrium.



The surgery was performed under standard cardiopulmonary bypass. Tumors were found to be soft and fragile (Fig 2). Left and right atrial masses were completely excised, and the attached atrial septum was resected (Fig 3). The interatrial residual defect was closed with a continuous suturing technique using 4-0 prolene sutures. Histopathological examination confirmed the diagnosis of myxoma. The patient was discharged 1 week after surgery and no recurrence was observed during the 24-month follow-up period.

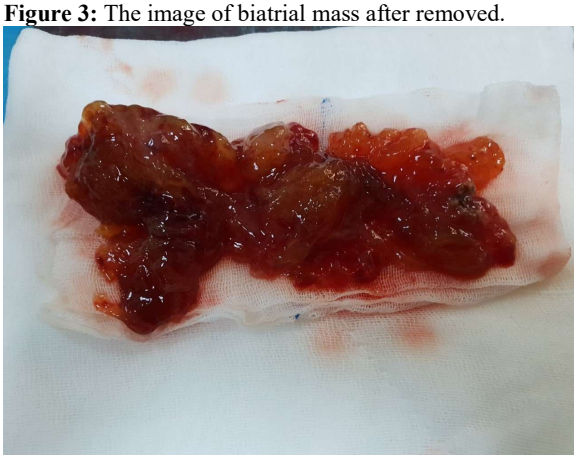
3. DISCUSSION

Myxoma is the most common primary tumor of the heart. Patients may present with symptoms of hemodynamic obstruction, embolization, or constitutional changes. Despite its benign character, it may lead to embolic events or even sudden death. Therefore, early diagnosis and quick treatment are mandatory to prevent life-threatening events in this patients.[2-4]

Echocardiographic examination is the primary diagnostic tool but in some cases further imaging modalities such as computed tomography or magnetic resonance imaging might be necessary for the further tissue characterization of the cardiac masses before planning a surgical intervention.[2] A subcostal view is strongly recommended as the interatrial septum is clearly shown and the masses in the both atriums are visible. It confirms the location and extension of the tumor as well as the site of attachment of the tumor.[2] Once the diagnosis is established, immediate surgical treatment is indicated in all patients to avoid further tumor embolism and valve obstruction. Prognosis is excellent after surgical excision. After surgery, regular follow-up with serial echocardiography is also very important to detect recurrence.[3,4]
The appendages of the myxoma are gelatinous and fragile. Therefore, they tend to break into pieces that may lead to systemic and pulmonary embolisms.[2,3] Because of this reason, once the diagnosis is confirmed, surgical excision of cardiac myxoma is required as soon as possible.

The patient did not have evident symptoms, and the tumors were small in size and did not obstruct the mitral and tricuspid valves, but floating in the both atria like thrombosis. Immediate surgical removal of the masses was necessary and was quickly performed. No recurrence of myxoma was observed during the two-year follow-up period.

Figure 3: The image of biatrial mass after removed.



4. CONCLUSION

Biatrial myxoma is a rare clinical situation. Surgical resection is the mainstay of treatment and recurrence is not reported. To avoid complications such as embolization, especially in the presence of mobile mass, surgical resection should be done urgently when diagnosed.

Conflict of Interest: The authors declare that no conflict of interest.

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