



A Giant Left Atrial Myxoma Causing Severe Pulmonary Hypertension. A Case Report[†]

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Myxoma is the most common type of primary cardiac tumors. Majority of cardiac myxomas are solitary and benign. It usually occurs in the left atrium and has a pedicle attached to the interatrial septum around the fossa ovalis. It is associated with different clinical symptoms of mechanical intracardiac obstruction, embolism or positional disturbances but may rarely remain asymptomatic for a long time as in our case. Pulmonary hypertension is a rare clinical condition associated with myxomas.

In this paper, we present a large, immobile, left atrial myxoma filling the whole left atrium and causing pulmonary hypertension.

Key Words: Myxoma; Echocardiography.

Ciddi Pulmoner Hipertansiyona Neden Olan Dev Sol Atriyal Miksoma. Bir Olgu Sunumu

Miksoma en sık görülen primer kardiyak tümör tipidir. Kardiyak miksomaların çoğunluğu tek ve beningdir. Genellikle sol atriyumda oluşur ve interatriyal septumun fossa ovalis civarına bağlanan bir pediküle sahiptir. Miksoma mekanik intrakardiyak tıkanma, emboli veya pozisyonel bozukluklar gibi farklı klinik semptomlarla ilişkilidir, fakat nadiren bizim olgumuzda da olduğu gibi, uzun süre asemptomatik kalabilir. Pulmoner hipertansiyon miksomaya bağlı nadir bir klinik durumdur.

Biz bu yazıda, büyük, sol atriyumu tamamen dolduran, hareketsiz ve pulmoner hipertansiyona neden olan bir miksomayı sunduk.

Anahtar Kelimeler: Miksoma; Ekokardiyografi.

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Introduction

Myxoma is the most common type of primary cardiac tumors, accounting for approximately 30-50% of all primary cardiac tumors.¹ It arises from mesenchymal cells.² Typically, myxomas are benign neoplasms. Tendency to recurrence and occurrence in multiple locations and familial predisposition are other characteristics of this tumor. The usual site of attachment is the interatrial septum around the fossa ovalis.^{3,4} In the present paper, we report a patient with left atrial myxoma filling the whole left atrium and causing pulmonary hypertension.

Case

A 69-year-old female patient, suffering from dyspnea and palpitation for one year was referred to outpatient clinic. Patient described shortness of breath during daily

activities. She gave no cardiac family history. Blood pressure and heart rate was 120/80 mmHg, 70/min, respectively. Electrocardiography revealed sinus rhythm and biochemical parameters were normal. Echocardiography revealed a giant left atrial mass (6×5 cm in diameter) filling the whole left atrium on parasternal long axis view (Figure 1).

It was spherical in shape and immobile due to the giant size. Left cardiac chamber was normal (dd: 4,3; ds: 2,28; ef: 79), but right chambers were dilated (ra: 4,5; rv: 4,7; pab: 45-50). We could not see its pedicle because the whole left atrium was filled by the mass. The absence of infiltration and polypoid appearance suggested a left atrial myxoma. Coronary angiography was performed to exclude coronary artery disease. Myxoma was evacuated as two pieces due to the technical difficulty in reaching whole tumor material. Surgical material of the left atrial myxoma was seen on Figure 2.

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The patient was stable on the postoperative period and she had no shortness of breath. Echocardiography was performed on the second postoperative day and right chamber sizes were decreased relatively, PAB was decreased to the normal level. The patients was discharged from the hospital on the fifth postoperative day. The patient was clinically stable in the first month follow-up.

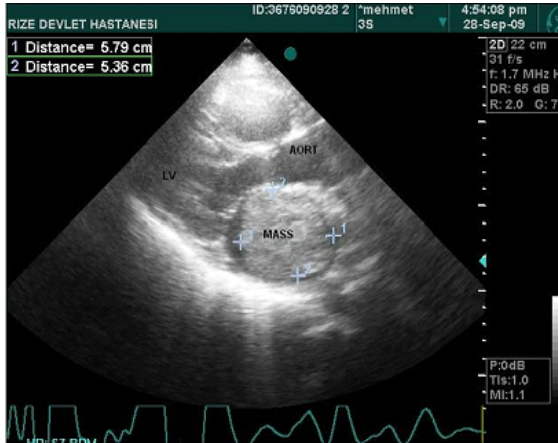


Figure 1. Giant left atrial myxoma, on parasternal long axis.

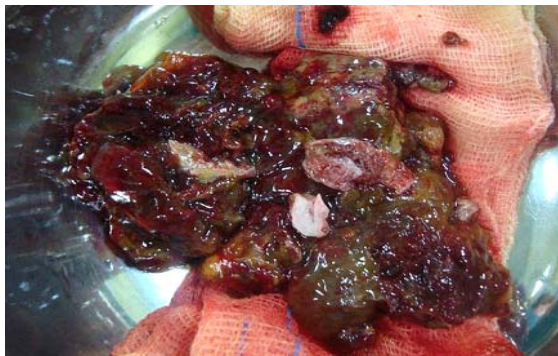


Figure 2. Surgical material of the left atrial myxoma

Discussion

Myxomas are the most common type of benign primary cardiac tumors.¹ Seventy percent of the myxomas are located in the left atrium as in the present case. Myxomas are associated with clinical symptoms of intracardiac obstruction, embolism, or constitutional disturbances, and may rarely remain asymptomatic if the rate of tumor growth is not rapid.⁵ Clinical symptoms of the patient is not atypical, in this regard,

the main symptom is shortness of breath and effort dyspnea. She has been suffering from this complaint for a long time but severity and the frequency has increased over the time. Echocardiographic examination of the patients suffering from such kind of symptoms plays an important role in the diagnosis. Echocardiographic examination revealed a large, immobile, spherical shape left atrial mass and pulmonary hypertension.

Myxomas are generally solitary and pediculated tumors, and the usual site of attachment is the interatrial septum in the region of the fossa ovalis.³ They have size ranging from 4 to 8 cm in diameter and moves through left ventricle during diastole.⁶ In our case, the mass was so large as, it could not be move and peduncle was not seen. Therefore, we scheduled surgery for both diagnosis and treatment. The patient was stable during postoperative period, and pulmonary artery pressure decreased to 20 mmHg. Surgical resection is the choice of treatment and the prognosis is usually good.

This case made us suggest that, myxomas can vary in size and clinical signs, they may be asymptomatic for years, and rarely may be accompanied by pulmonary hypertension.

References

1. Reynen K. Cardiac myxomas. *N Engl J Med* 1995;333(24):1610-7.
2. Pucci A, Gagliardotto P, Zanini C, Pansini S, di Summa M, Mollo F. Histopathologic and clinical characterization of cardiac myxoma: Review of 53 cases from a single institution. *Am Heart J* 2000;140(1):134-8.
3. Ipek G, Erentug V, Bozbuğa N, Polat A, Guler M, Kirali K. Surgical management of cardiac myxoma. *J Card Surg* 2005;20(3):300-4.
4. Meng Q, Lai H, Lima J, Tong W, Qian Y, Lai S. Echocardiographic and pathologic characteristics of primary cardiac tumors: a study of 149 cases. *Int J Cardiol* 2002;84(1):69-75.
5. Pinede L, Duhaut P, Loire R. Clinical presentation of left atrial cardiac myxoma: a series of 112 consecutive cases. *Medicine* 2001;80(3):159-72.
6. Grebenc ML, Rosado-de-Christenson ML, Green CE, Burke AP, Galvin JR. Cardiac myxoma: Imaging features in 83 patients. *Radiographics* 2002;22(3):673-89.

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