

A Rare Cause of Dyspnea: Left Atrial Myxoma Mimicking Pulmonary Embolism

Dispnenin Nadir Bir Nedeni: Pulmoner Emboliyi Taklit Eden Solatriyal Miksoma

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ABSTRACT

Primary cardiac tumors are rare. Myxomas are the most common type of these rare tumors. About 75% of myxomas occur in the left atrium of the heart usually beginning in the wall (interatriyal septum) that divides the two upper chambers of the heart. They are usually benign in nature. Some of them may remain asymptomatic but sometimes may exhibit a variety of non-specific clinical symptoms. Because of nonspecific symptoms, early diagnosis may be difficult, particularly in the early stages. The common signs and symptoms of myxomas are shortness of breath, orthopnea, paroxysmal nocturnal dyspnea, pulmonary edema, cough, hemoptysis, edema and fatigue. In this report, we presented a case of a 76-year-old woman with profound heart failure symptoms, and left atrial myxoma mimicking pulmonary embolism.

Key Words; Atrial myxoma, dyspnea, pulmonary embolism

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ÖZET

Primer kardiyak tümörler nadir olup miksomalar bu nadir tümörlerin en sık görülen tipidir. Miksomaların yaklaşık %75'i kalbin sol atriyumunda görülür ve genellikle kalbi üst iki odacığa bölen (interatriyal septum) duvardan başlar. Genellikle iyi huyludurlar. Bazen asemptomatik seyrederler, bazen ise nonspesifik klinik semptomlar gösterebilirler. Nonspesifik semptomlar nedeniyle özellikle ilk evrelerde erken tanı zor olabilir. Miksomaların en sık semptom ve bulguları nefes darlığı, paroksizmal noktürnal dispne, pulmoner ödem, öksürük, hemoptizi, ödem ve halsizliktir. Bu yazıda, belirgin kalp yetersizliği semptomları olan pulmoner emboliyi taklit eden sol atriyal miksoması olan 76 yaşında bayan olguyu sunduk.

Anahtar Sözcükler: Atriyal miksoma, dispne, pulmoner emboli

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INTRODUCTION

Atrial myxomas are the most common primary heart tumors. Symptoms are produced by mechanical interference with cardiac function or embolization. Signs and symptoms of mitral stenosis, endocarditis, mitral regurgitation, and collagen vascular disease can simulate those of atrial myxoma (1-3) However; until now, to our knowledge, there is no published study of a patient with myxoma involving a diagnosis of pulmonary embolism. Such a patient was admitted to our emergency department with profound dyspnea mimicking pulmonary embolism. We report a case of a 76-year-old woman who presented with heart failure symptoms, and was found to have left atrial myxoma mimicking pulmonary embolism.

CASE REPORT

A 76-year-old woman was admitted to the emergency department with a three weeks history of progressive dyspnea and moderate extremity edema. The patient had a history of type 2 diabetes mellitus and a lumbar fracture operation that took place two months ago.

A diagnosis of pulmonary embolism was considered because of the patient's limited mobility and predisposing factors. Her pressure was 120/70 mmHg, pulse rate 110 bpm/regular, respiratory rate 26 per minute and temperature 37.1 °C. An apical 2/6 holosystolic murmur and bilateral crackles on the middle and lower zones of lung were audible in auscultation.

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Hypocarbica and hypoxemia was observed in arterial blood gas analysis and D-dimer level was mildly high, so pulmonary CT angiography was performed in the emergency department. There was no consistent view of thrombus on the branches of the pulmonary artery, but incidentally a view of myxoma in the left atrium connected with the handle to interatrial septum was detected by pulmonary computed tomography (CT) angiography (Figure 1).

Transthoracic echocardiography was compatible with myxoma invading the left atrium with a size of 30x20 mm (Figure 2-3). Moderate mitral insufficiency was detected, left ventricular systolic and diastolic functions were normal. Therefore, the patient was admitted to the cardiology service with a diagnosis of decompensated heart failure and was held for the optimal medical treatment. In the follow up, the patient's cardiac symptoms were decreased so she was referred to the cardiovascular surgery service for the removal of myxoma.

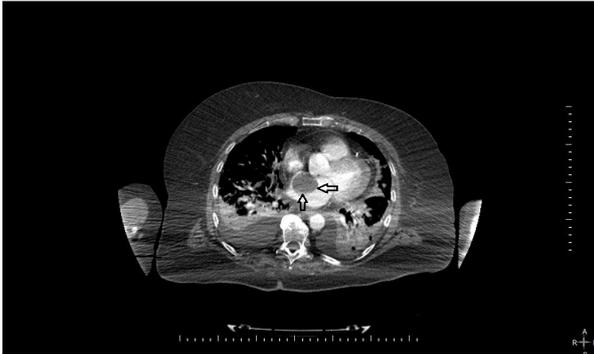


Figure 1. CT scan view of left atrial myxoma connected with handle to interatrial septum (arrowheads).



Figure 2. Echocardiography. Parasternal long axis view of left atrial myxoma (arrowhead).



Figure 3. Echocardiography. Apical four chamber view of left atrial myxoma (arrowhead).

DISCUSSION

Atrial myxomas are the most common primary heart tumors. Some of them may remain asymptomatic, but sometimes, may exhibit a variety of non-specific clinical symptoms. Congestive heart failure, peripheral embolization, and recurrent syncope may be seen, mimicking many cardiovascular diseases (2). Although it was not mentioned in the differential diagnosis, in our case pulmonary embolism with typically clinical symptoms was diagnosed as a priority in the emergency department. Despite the advanced age, the patient previously had no cardiac disease. Atrial myxoma were diagnosed by pulmonary CT angiography incidentally.

CT, magnetic resonance imaging (MRI) and transthoracic echocardiographic evaluation of atrial myxomas are the most useful diagnostic tools. In almost all cases these imaging modalities show the size and site of the tumor and indicates whether or not the patient is a candidate for surgery (4).

Most myxomas arise from the interatrial septum. Without surgical treatment, mid and long-term prognosis is considered to be bad. Myxoma resection surgery is an effective, low risk and safe treatment modality (5).

In our case, we detected hypocarbica and hypoxemia in arterial blood gas analysis. D-dimer level was also mildly high. Thus, pulmonary CT angiography was performed, but there was no consistent view of thrombus in the main and pulmonary artery branches. However, incidentally a view of myxoma in the left atrium connected with the handle to interatrial septum was detected in CT.

CONCLUSION

We described the clinical features and imaging characteristics of cardiac myxoma as an unusual case. It will be useful to keep in mind pulmonary embolism in the differential diagnosis of atrial myxomas.

Conflict of Interest

No conflict of interest was declared by the authors.

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