

Sol ventrikül kitle imajı gibi görünen idiopatik sol ventrikül psödoanevrizması*Idiopathic left ventricular pseudo aneurysm that look like left ventricle mass image*

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Özet

Kardiyak kitlelerin tanısında ilk basamak transtorasik ekokardiyografi ve transözefagial ekokardiyografidir. Ayırıcı tanıda koroner angiografi, MDCT ve manyetik rezonans görüntüleme kullanılır. Biz ekokardiyografik inceleme sırasında sol ventrikül kitle imajına benzeyen bir sol ventrikül psödoanevrizması olgusu sunduk.

Abstract

The first step for the diagnosis of cardiac masses is transeophageal and transthoracic echocardiography. Coronary angiography, multi detector computed tomography (MDCT) and magnetic resonance imaging are used for differential diagnosis(1). We present a case of left ventricular pseudo aneurysm which resembles left ventricular mass image in the echocardiographic examination.

Anahtar Kelimeler: Kardiyak kitle, psödoanevrizma, sol ventrikül

Keywords: Cardiac mass, pseudoaneurysm, left ventricle

Case

A 82 year-old female patient admitted to cardiology clinic complain about chest pain, palpitation and dyspnea. The symptoms were exacerbated within 5 days. Hypertension was present as a risk factor. Her blood pressure was 155/95 mmHg, and pulse-rate was regular at a rate 85/min. On Physical examination there was no any significant problem. There was no ischemic sign in the electrocardiography. The transthoracic echocardiography (TTE) examination showed an image that looks like a bulk attached on left ventricular wall (Figure 1-2).

The mass was confirmed by transeophageal echocardiography. Moreover, multiple detector computed tomography (MDCT) was performed for the differential diagnosis of the mass. The MDCT examination demonstrated a pseudo aneurysm that was protruding

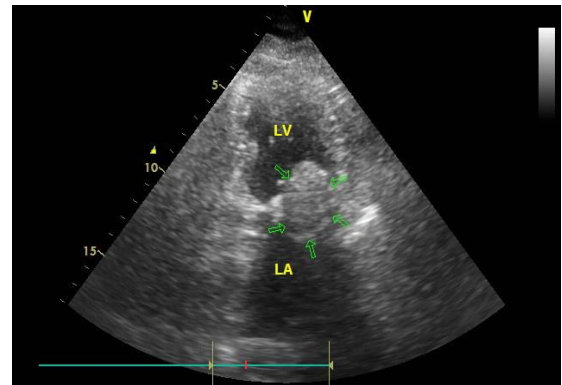


Figure 1. Transthoracic echocardiography showed that a mass attached to mitral valve in apical two chamber view.

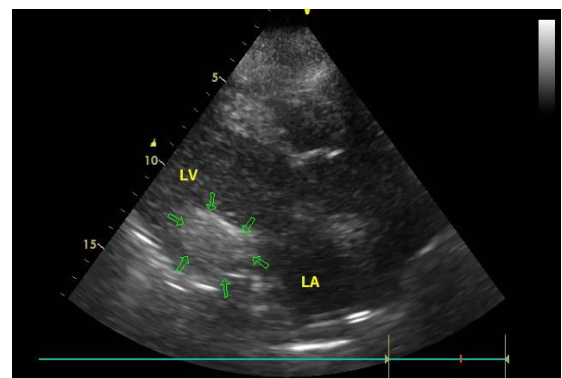


Figure 1. Transthoracic echocardiography showed that a mass attached to mitral valve in apical two chamber view.

outside the lateral wall of left ventricle and that is full of contrast material was traced (Figure 3-4). Coronary angiography and left ventriculography were suggested, but did not accepted by patient. Also, the patient did not accepted surgery yet. She was discharged with medical treatment. During follow-up (3 and 6 months) revealed no increase in aneurysm size.

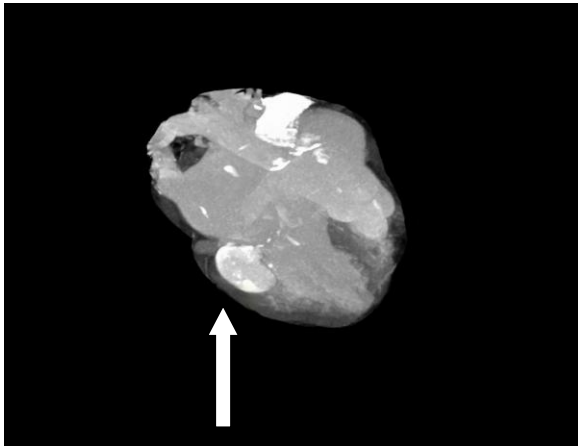


Figure 3. Multislice CT demonstrated the turbulent flow in aneurysm that mimicking mass.

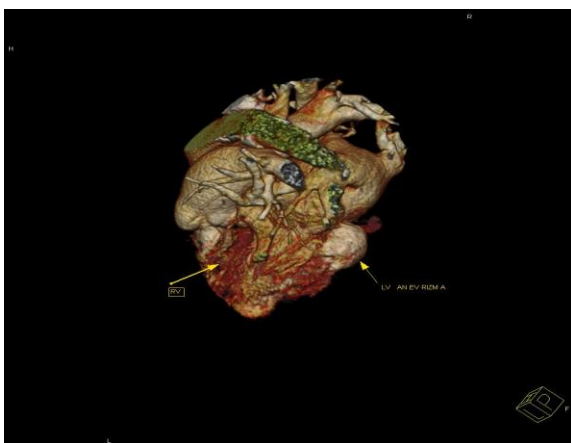


Figure 4. Thoracic multislice CT showed that left ventricular posterior wall aneurysm which is full of contrast and makes bulging from the lateral and posterior walls of the left ventricle.

Discussion

Earlier studies have reported that, pseudo and true ventricular aneurysms are differs from as etiology, pathology and morphologies(1). Rate of pseudo aneurysm orifice/ aneurysm diameter are low than <0.5 (narrow mouth)(1,2). Pseudo aneurysm is often located into the posterior of left ventricular. Occurrence of

aneurysm may be come in sight after myocardial rupture, myocardial infarction (usually inferior MI), surgery (MVR etc) and chest trauma(1–3). The false aneurysm which formed due to rupture of myocardial infarction is divided into three types according to the classification of Treasure. If the hematoma formation is limited to the pericardium, false aneurysm occurs from outer wall of the pericardium(1–3).

False aneurysm of the inferior myocardial infarction occurs two times more likely than anterior infarction and it more occurs after from infarction due to right coronary or circumflex coronary artery(4,5).

Pseudo aneurysms which is consist of connective tissue and pericardium, does not include myocardial tissue and thrombus(1,4). Echo-free space is determined in transthoracic echocardiography and also “to-and- fro” (with ups and downs) flow determined in pulse Doppler echocardiography(1,3,7). The orifice of false aneurysms smaller the nozzle rate and duration of the sistolik pulse wave doppler shortened. If the false aneurysm is located on the posterior Wall, it must be differentiated from the pericardial cyst, descending aorta, localized pericardial effusion, heamatoma or dilated coronary sinüs(8). Cardiac magnetic resonance imaging is may be used for diagnosis of false aneurysm and also surgical decision. Left Ventriculography is the most important investigation for to know boundaries of aneurysm, septal wall motion and determination of myocardial area excluding the aneurysm(1,5,8). Pseudo aneurysms may lead to heart failure, arrhythmias, thromboembolism and infective endocarditis(1,3,4). Therefore it is recommended surgery after diagnosis. Surgical procedures, closure of the aneurysm’s orifice through c-endocardial or epicardial approach(9). Transcatheter



closure of the left ventricular pseudoaneurysm is a feasible alternative for high-risk surgical candidates(10).

Conclusion

It is important to note that the images of mass which detected in echocardiographic examination should be evaluated along with the MDCT. We believe that this kind of evaluation plays an important role in differential diagnosis.

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