

sponding video/movie images at www.anakarder.com). Cardiac MRI was performed to confirm the diagnosis. The vertical long-axis images of MRI confirmed a giant, mobile, accordion like IASA and small atrial septal defect (Fig. 2D, Video 8. See corresponding video/movie images at www.anakarder.com). There were no additional cardiac abnormalities. Treatment with acetyl salicylic acid started and routine control was planned.

Video 1. Apical 4-chamber of TTE shows a giant, mobile IASA

TTE - transthoracic echocardiography, IASA- interatrial septal aneurysm

Video 2. Subcostal window of TTE shows a giant, mobile IASA

TTE - transthoracic echocardiography, IASA - interatrial septal aneurysm

Video 3. Apical 4-chamber window shows spontaneous bubble transition from right to left atrium

Video 4. Apical 4-chamber window shows bubble transition from right to left atrium during Valsalva maneuver

Video 5. TEE image from 120 degree mid-esophageal level shows an accordion like IASA.

TEE - transesophageal echocardiography, IASA - interatrial septal aneurysm

Video 6. TEE image from 120 degree mid-esophageal level shows transition from small atrial septal defect by color Doppler

TEE - transesophageal echocardiography, IASA - interatrial septal aneurysm

Video 7. 3D RTEE 120 degree mid-esophageal level shows accordion like IASA

3D RTEE - three-dimensional real-time transesophageal echocardiography, IASA - interatrial septal aneurysm

Video 8. Vertical long axis view of cardiac MRI shows IASA and small atrial septal defect.

IASA - interatrial septal aneurysm, MRI - magnetic resonance imaging

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Huge caseous calcification of the mitral annulus mimicking cardiac mass presented with atrioventricular block and severe mitral regurgitation



Atriyoventriküler blok ve ciddi mitral yetersizliği ile ilişkili kardiyak kitleyi taklit eden mitral anulüsün dev kazeöz kalsifikasyonu

The mitral valve apparatus involves the mitral leaflets, chordae tendineae, papillary muscles, and mitral annulus. Abnormalities of any

of these structures may cause mitral regurgitation (MR). The major causes of MR include mitral valve prolapse, rheumatic heart disease, infective endocarditis, annular calcification, cardiomyopathy, and ischemic heart disease. Calcification of the mitral annulus is one of the most common cardiac abnormalities found at autopsy; in most hearts, it is of little functional consequence. However, when calcification is severe it may be an important cause of MR.

An 82-year-old woman with a history of hypertension and hyperlipidemia admitted to hospital with the main complaint of progressive shortness of breath upon minimal exertion. Physical examination revealed bradycardia and a systolic murmur of 3-4/6 grade at the left lower sternal border. Laboratory examinations were normal. On admission, the electrocardiogram (ECG) showed third degree atrioventricular block, with a ventricular rate of 35/min. Transthoracic echocardiography (TTE) showed a round huge mass in the posterior mitral annulus which extended to the basal area, causing severe mitral regurgitation without significant valve stenosis (Fig. 1, Video 1, 2. See corresponding video/movie images at www.anakarder.com). Due to symptomatic

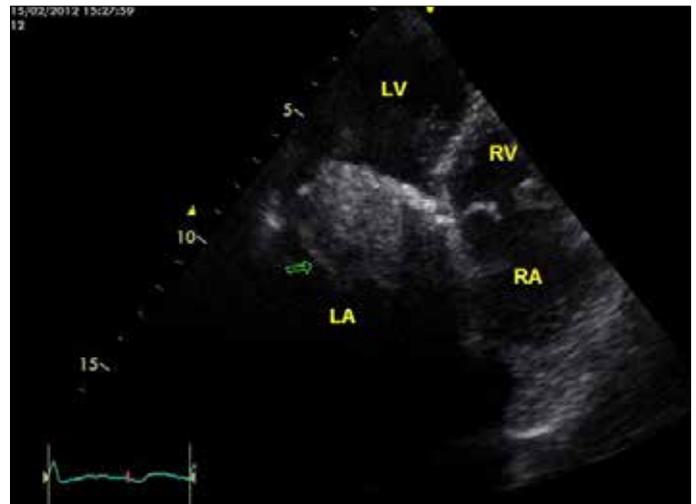


Figure 1. Apical four- chamber TTE shows huge calcific mass in the mitral valve

Arrow-the calcified mass, LA - left atrium, LV - left ventricle, RA - right atrium, RV - right ventricle, TTE - transthoracic echocardiography

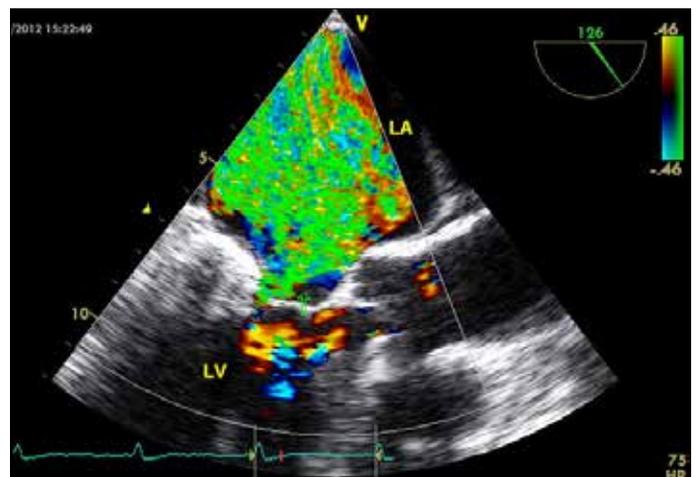


Figure 2. TEE demonstrates caseous calcification of the mitral annulus mimicking mass and severe mitral regurgitation

Arrow - severe mitral regurgitation, LA - left atrium, LV - left ventricle, TEE - transesophageal echocardiography

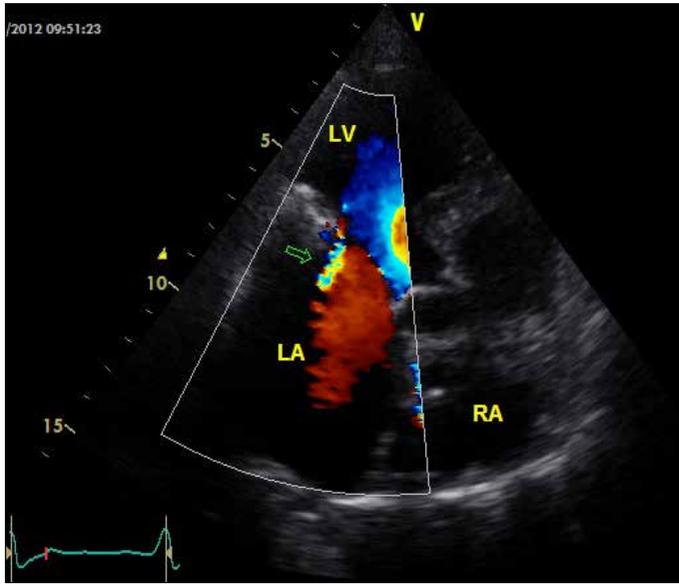


Figure 3. View of mild mitral regurgitation after a dual-chamber pacemaker placement (arrow)

severe mitral regurgitation and a suspicion of cardiac mass, transthoracic echocardiography (TTE) was performed. TTE demonstrated severe mitral regurgitation and a huge caseous calcification of the mitral annulus mimicking a mass in the posterior mitral annulus (Fig. 2, Video 3. See corresponding video/movie images at www.anakarder.com). We decided to place a dual-chamber pacemaker due to atrioventricular block. After dual-chamber pacemaker implantation mitral regurgitation decreased and on transthoracic echocardiographic examination mild mitral regurgitation was seen (Fig. 3, Video 4. See corresponding video/movie images at www.anakarder.com). The symptoms resolved and the patient was discharged. We conclude that caseous calcification of the mitral annulus should be considered a cause not only in the background MR but also in the differential diagnosis of cardiac masses and conduction system disease.

Video 1, 2. Apical four -and five- chamber TTE shows huge calcific mass in the mitral valve

TTE - transthoracic echocardiography

Video 3. TEE demonstrates caseous calcification of the mitral annulus mimicking mass and severe mitral regurgitation

TTE - transthoracic echocardiography

Video 4. View of mild mitral regurgitation after a dual-chamber pacemaker placement

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Three-dimensional echocardiographic evaluation of an anterior mitral leaflet perforation and aortic vegetation due to infective endocarditis



Enfektif endokardite bağlı gelişen aort kapak vejetasyonunun ve anterior mitral kapak perforasyonunun üç boyutlu transözefajiyal ekokardiyografi ile değerlendirilmesi

Complicated left-sided native valve infective endocarditis remains a serious disease with significant morbidity and mortality. Mitral perforations are rare complications of destructive endocarditis. A 50-year-old woman has applied for fever and shortness of breath for 3 months. Electrocardiography showed a sinus tachycardia. Two-dimensional transthoracic echocardiography demonstrated severe mitral and aortic regurgitation. Two-dimensional transesophageal echocardiography (2D-TEE) revealed mitral valve perforation and aortic valve vegetation (Fig.1A and Video 1A. See corresponding video/movie images at www.anakarder.com), also severe aortic and mitral regurgitation because of destructive endocarditis (Fig. 1B and Video 1B. See corresponding video/movie images at www.anakarder.com). To better define this pathology, we performed three dimensional transesophageal echocardiography (3D-TEE). 3D zoom modality TEE displayed mitral valve perforation at A2 scallop (Fig.1C and Video 1C. See corresponding video/movie images at www.anakarder.com) and vegetation at the aortic valve (Fig. 1D). Infective endocarditis is a life-threatening disease still associated with a high mortality rate despite recent advances in diagnostic imaging, antimicrobial, and surgical therapies. Aortic valve is primarily affected in the left-sided endocarditis, and then mitral anterior

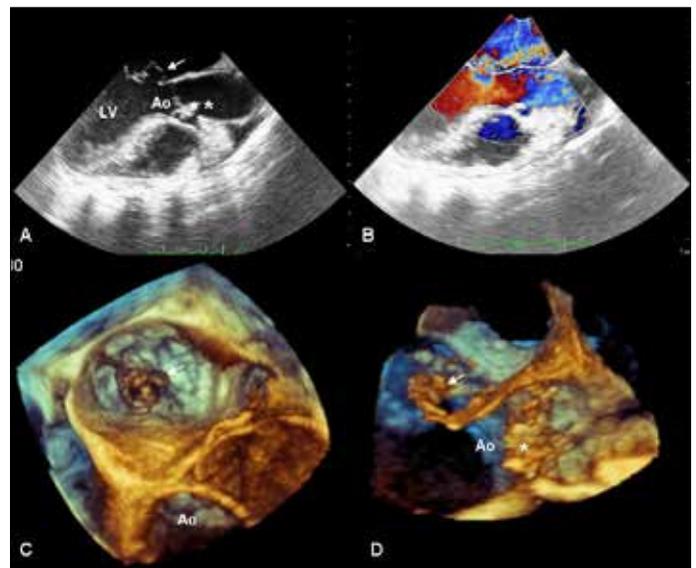


Figure 1. A) Two-dimensional transesophageal echocardiography showing mitral valve perforation and aortic valve vegetation, B) Two-dimensional transesophageal echocardiography displaying severe aortic and mitral regurgitation because of destructive endocarditis, C) 3D zoom modality TEE displaying mitral valve perforation at A2 scallop, D) 3D zoom modality TEE showing vegetation at the aortic valve

Ao - aorta, arrow-perforation of anterior mitral valve, asterisk-aortic vegetation, LV - left ventricle, TEE - transesophageal echocardiography