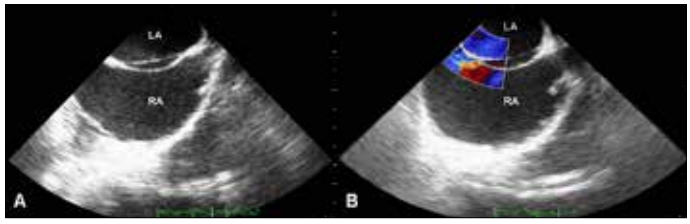

Figure 1. Two-dimensional transesophageal echocardiography views of a high mobile membrane adjacent and parallel to interatrial septum (A) and PFO with left- to -right shunt (B)

LA - left atrium, PFO - patent foramen ovale, RA - right atrium, asterisk: double interatrial septum

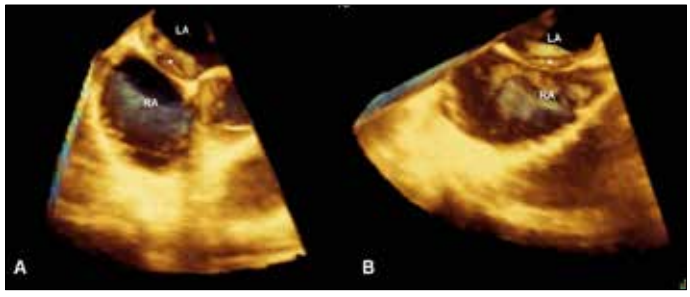

Figure 2. Three-dimensional transesophageal echocardiography view of a double interatrial septum

LA - left atrium, RA - right atrium

the same patient, which may be source of embolic events. Two and three-dimensional transesophageal echocardiography was performed in order to define better the IAS anatomy.

Video 1. Two-dimensional transesophageal echocardiography view of a high mobile membrane adjacent and parallel to interatrial septum

Video 2. Two-dimensional transesophageal echocardiography views of a high mobile membrane adjacent and parallel to interatrial septum, and PFO with left -to right shunt

Video 3. Three-dimensional transesophageal echocardiography short-axis view of a double interatrial septum

Video 4. Three-dimensional transesophageal echocardiography bicaval level view of a double interatrial septum

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Available Online Date/Çevrimiçi Yayın Tarihi: 05.11.2012

doi:10.5152/akd.2013.017

Accordion-like giant interatrial septal aneurysm

Akordiyon benzeri dev interatriyal septal anevrizma

A 21-year-old man was admitted to our hospital with exertional dyspnea. Physical examination findings were normal. Electrocardiography was in normal sinus rhythm. Transthoracic echocardiography (TTE) showed that EF 65%, Qp/Qs:1 and right heart chambers were in normal size. A giant, mobile, accordion like interatrial septal aneurysm (IASA) were detected at apical 4-chamber and subcostal short-axis window (Fig. 1A,B, and Video 1, 2. See corresponding video/movie images at www.anakarder.com). After administration of agitated saline both spontaneously and Valsalva maneuver, plenty of bubble passed through right to left atrium (Fig. 1 C, D and Video 3, 4. See corresponding video/movie images at www.anakarder.com). Transesophageal echocardiography (TEE) showed transition from right to left atrium by color Doppler in the small fenestration of accordion like IASA (small atrial septal defect) (Fig. 2A, C and Video 5-7. See corre-

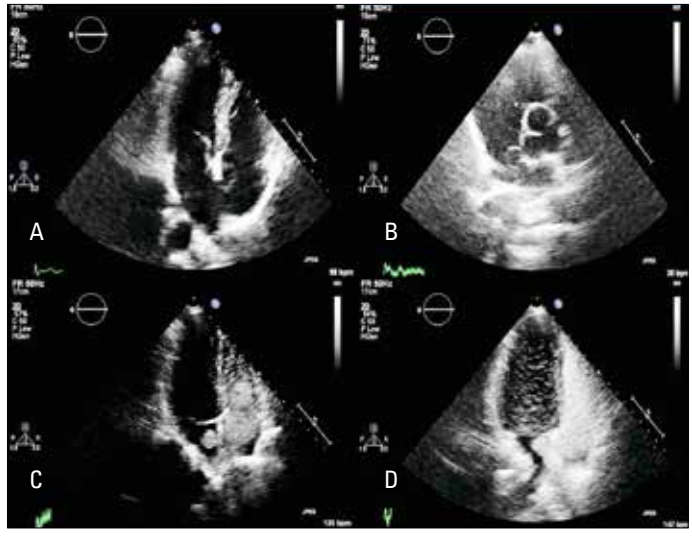

Figure 1. A, B) TTE apical 4-chamber and subcostal views of a giant, mobile IASA, C, D) Apical 4-chamber view spontaneous and during Valsalva maneuver bubble transition from right-to-left atrium

IASA - interatrial septal aneurysm, TTE - transthoracic echocardiography

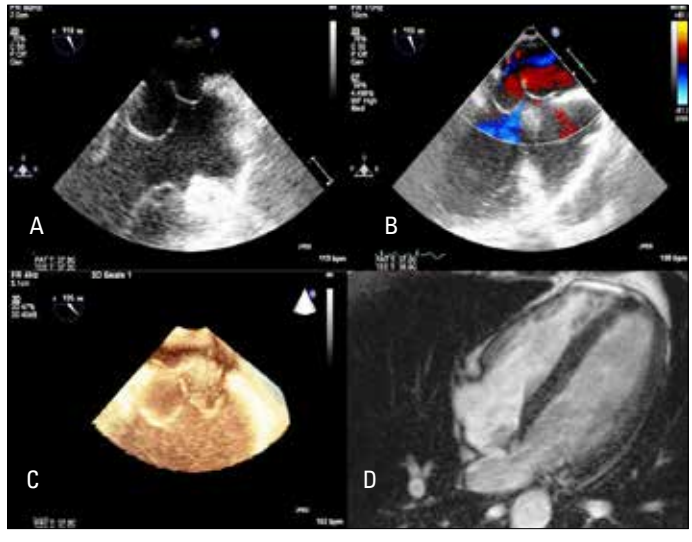

Figure 2. A, B) TEE image from 120 degree mid-esophageal level shows an accordion like IASA and transition from small atrial septal defect by color Doppler. IASA-interatrial septal aneurysm, C) 3D RTEE shows accordion like IASA, D) Vertical long-axis view of cardiac MRI showed IASA and small atrial septal defect.

3D RTEE - three-dimensional real-time transesophageal echocardiography, IASA - interatrial septal aneurysm, MRI - magnetic resonance imaging, TEE - transesophageal echocardiography

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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Available Online Date/Çevrimiçi Yayın Tarihi: 05.11.2012

doi:10.5152/akd.2013.018

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 anülüsün 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

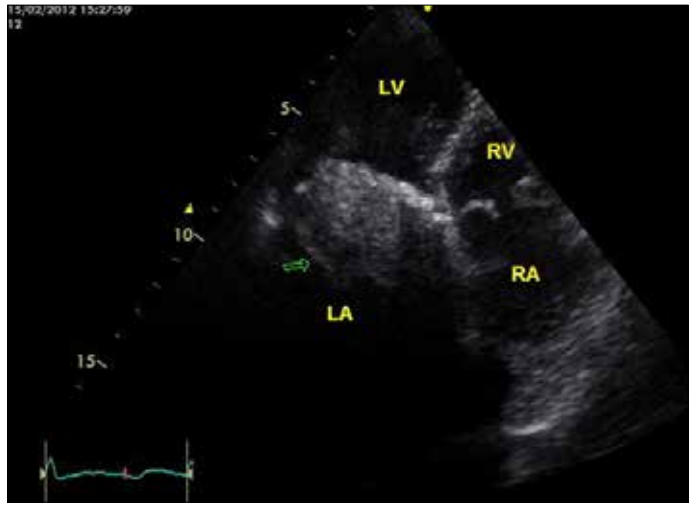

Figure 1. Apical four- chamber TTE shows huge calcific mass in the mitral valve
Arrow-the calcified mass, LA - left atrium, LV - left ventricle, RA - right atrium, RV - right ventricle, TTE - transthoracic echocardiography

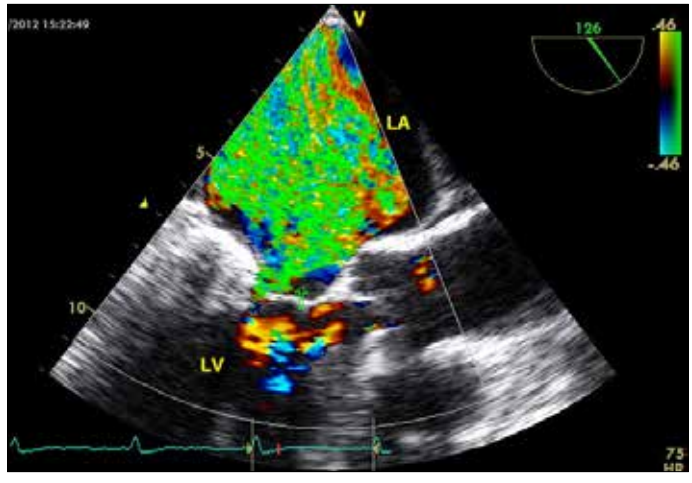

Figure 2. TEE demonstrates caseous calcification of the mitral annulus mimicking mass and severe mitral regurgitation
Arrow - severe mitral regurgitation, LA - left atrium, LV - left ventricle, TEE - transesophageal echocardiography