RT-3D TEE provides a more comprehensive delineation of prosthetic valve thrombosis with 'en face' images compared to conventional 2D TEE which may underestimate or even miss thrombi, particularly when it is ring-located and non obstructive- 'Doppler silent'. RT-3D TEE may inform the clinician about the total thrombus burden in detail helping to organize a more strict anticoagulation therapy.

**Video 1.** Real-time 3-dimensional transesophageal echocardiography delineates crown-like and ring-located prosthetic valve thrombosis.

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# A parachute mitral valve accompanying persistent left superior vena cava: assessment by three-dimensional transthoracic echocardiography

## Üç boyutlu transtorasik ekokardiyografi ile değerlendirilen persistan sol superiyor vena kavanın eşlik ettiği paraşüt mitral kapak

A 25-year-old-male patient applied to our outpatient clinic with palpitation and shortness of breath. His medical and family history was unremarkable. The 12-lead electrocardiogram showed a sinus rhythm. Two-dimensional transthoracic echocardiography revealed dilated coronary sinus (CS) and parachute mitral valve (PMV). The max/mean pressure gradient across the mitral valve was 9/5 mmHg (Fig. 1 A). Because of the enlarged CS, we injected agitated saline into left antecubital vein to determine whether there was an associated persistent left superior vena cava (PLSVC). Injection resulted in opacification of the dilated coronary sinus and subsequently the right atrium (Fig. 1B). For further evaluation of this pathology, we applied three-dimensional transthoracic echocardiography (3D TTE), which revealed morphological features of this pathology in detail (Fig 1C-1F and Video C, D, E and F-See corresponding video/movie images at www.anakarder.com). Characteristic findings of PMV are the presence of solitary papillary muscle (Fig. 1C, 1E and Video C, E-See corresponding video/ movie images at www.anakarder.com), funnel shape of mitral valve (Fig. 1F and Video F), doming shape of elongated chordae tendinea (Fig. 1C, 1E and Video C, E-See corresponding video/movie images at www.anakarder.com) and pear-like shape of left atrium (Fig. 1C-1E and Video C, D, E-See corresponding video/movie images at www.anakarder.com).

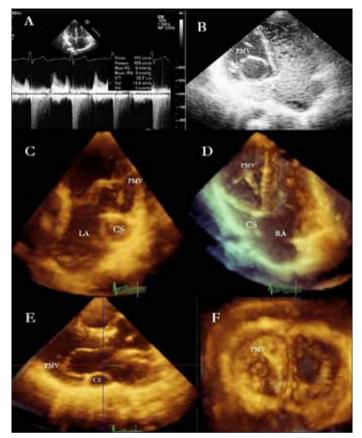


Figure 1. Transthoracic echocardiography revealing 9/5 mmHg pressure gradient across the mitral valve (A), agitated saline injection resulting in opacification of the dilated coronary sinus and subsequently the right atrium (B), three-dimensional transthoracic echocardiography (3D TTE) revealing characteristic findings of PMV including solitary papillary muscle (Figure and Video C, E), funnel shape of mitral valve (Figure and Video F), doming shape of elongated chordae tendinea (Figure and Video C, E) and pear-like shape of left atrium (Figure and Video C, D, E)

CS - coronary sinus, LA - left atrium, PMV - parachute mitral valve, RA - right atrium

PMV is commonly associated with other cardiac abnormalities. Adult patients with PMV are usually asymptomatic and most often diagnosed incidentally echocardiography done for another reason. Although, echocardiography is main diagnostic tool in majority of cases, identification of all PMV characteristics sometimes needs complementary imaging modalities. We used 3D- echocardiography in our case that provided invaluable information about PMV in TTE images.

**Video 1.** Transthoracic echocardiography revealing 9/5 mmHg pressure gradient across the mitral valve (A), agitated saline injection resulting in opacification of the dilated coronary sinus and subsequently the right atrium (B), three-dimensional transthoracic echocardiography (3D TTE) revealing characteristic findings of PMV including solitary papillary muscle (Figure and Video C, E), funnel shape of mitral valve (Figure and Video C, E) and pear-like shape of left atrium (Figure and Video C, D, E).

CS - coronary sinus, LA - left atrium, PMV - parachute mitral valve, RA - right atrium

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## Pseudocirrhosis; constrictive pericarditis due to huge calcific pericardial cystic mass compressing right cardiac chambers

### Yalancı siroz; sağ kalp boşluklarına bası yapan dev kalsifik perikardiyal kistik kitlenin neden olduğu konstriktif perikardit

A 29-year-old- male patient was admitted to our cardiology department with the complaints of an exertional dyspnea, abdominal distention of six months' duration. On physical examination, muffled heart sounds without murmur, venous dilatation of the extremities, neck vein distension, hepatojugular reflux, significant hepatomegaly and abdominal ascites were detected. Chest X-ray demonstrated a huge hyperdense calcific mass under the sternum (Fig. 1). Transthoracic echocar-

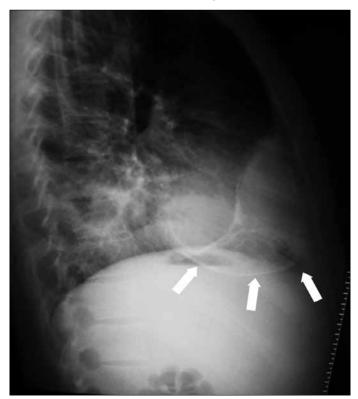


Figure 1. Chest X-Ray showing huge hyper-dense, double layered cystic mass just beneath the sternum (arrows)

diography showed a large hyperechoic cystic lesion (10x7.5 cm in size) which compressed the right ventricle (RV) and atrium (RA) (Fig. 2). Constrictive filling pattern was found by Doppler echocardiographic evaluation (Fig. 3). Computed tomography (CT) displayed a low-density area, cystic lesion which was located in the anterior mediastinum adja-

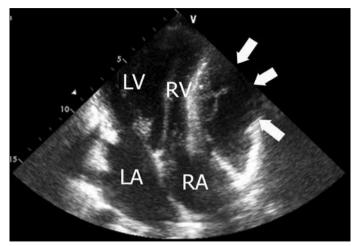


Figure 2. Two-dimensional echocardiographic evaluation of pericardial cystic mass (arrows)

LA - left atrium, LV - left ventricle, RA - right atrium, RV - right ventricle

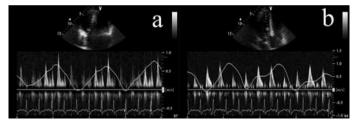


Figure 3. Doppler echocardiography showing respiratory changes in mitral-tricuspid inflow pattern (a-b) Inspiration results in increased tricuspid inflow, decreased mitral inflow and expiration results in decreased tricuspid inflow, increased mitral inflow. LA - left atrium, LV - left ventricle, RA - right atrium, RV - right ventricle

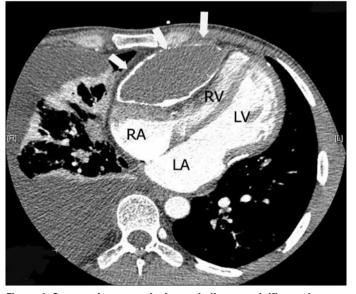


Figure 4. Computed tomography image indicates calcific cystic mass compressing right cardiac chambers (arrows) LA - left atrium, LV - left ventricle, RA - right atrium, RV - right ventricle