

normal. Heart rate and blood pressure were 90bpm and 120/85 mmHg respectively. Electrocardiography (ECG) showed sinus rhythm with a normal axis. The chest X-ray was unremarkable. Two-dimensional (2D) and real-time 3-dimensional (3D) transthoracic echocardiography (TTE) revealed a very mobile (characterized by whip-like motion), thin, filamentous structure in the right atrium (Chiari network) prolapsing into right ventricle through the tricuspid orifice during diastole (Fig.1, 2, Video 1-5. See corresponding video/movie images at www.anakarder.com). Other echocardiographic findings were normal. After injection of agitated saline into an upper extremity vein was not detected right-to-left shunt by transthoracic contrast echocardiography. Therefore, we recommended echocardiographic follow-up to the patient.

Chiari network is a congenital remnant of the right valve of the sinus venosus, which was first described by Dr. Hans Chiari in 1897 in an autopsy series. Chiari network is often diagnosed incidentally and estimate prevalence is 2% in TEE and 1.5% in TTE studies. Generally this congenital remnant considered clinically insignificant but it may be associated with patent foramen ovale (in about 80% of patients), intra-atrial thrombus, thromboembolic events, formation of inter-atrial septal aneurysm, infective endocarditis, supraventricular arrhythmias and catheter entrapment.

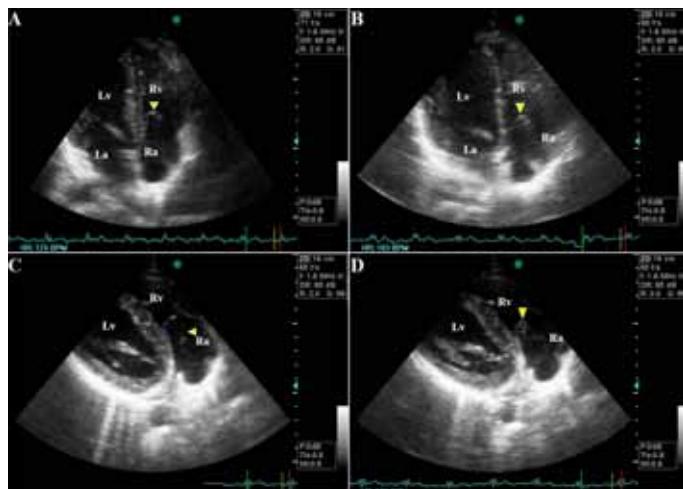


Figure 1. A-B. Apical four-chamber views of the prominent Chiari network prolapsing into right ventricle through tricuspid orifice during diastole (arrows). C-D. Modified parasternal long-axis views of the prominent Chiari network prolapsing into right ventricle through tricuspid orifice during diastole (arrows)

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



Figure 2. Real-time 3-dimensional (3D) transthoracic echocardiographic views of a prominent Chiari network. A. Apical four-chamber view during systole B. Apical four-chamber view of the prominent Chiari network prolapsing into right ventricle during diastole (arrows)

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

Video 1: Two-dimensional (2D) transthoracic echocardiographic view of prominent Chiari network from apical four-chamber view

Video 2: Two-dimensional (2D) transthoracic echocardiographic view of prominent Chiari network from modified parasternal long-axis view

Video 3-5: Real-time 3-dimensional (3D) transthoracic echocardiographic views of prominent Chiari network

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Lipomatous hypertrophy of the interatrial septum demonstrated by three-dimensional transesophageal echocardiography



İnteratriyal septumun lipomatöz hipertrofisinin üç boyutlu transösophageal ekokardiyografi ile gösterilmesi

Lipomatous hypertrophy of the interatrial septum (LHAS), characterized with lipid deposition in the interatrial septum, is thought to be benign and rarely associated with clinical manifestations. It is most often found incidentally in the elderly patients during echocardiography done for another reason. This tumor must be differentiated from other types of lesions including myxomas, true cardiac lipomas, liposarcomas, parietal thrombi, metastatic tumors and amyloidosis that appear as septal tumor mass.

A 78-year-old man was referred for the evaluation of intracardiac mass detected on transthoracic echocardiography. We performed transesophageal echocardiography for the detection of the nature of this mass and it showed lipomatous hypertrophy of the interatrial septum (Fig. 1). For better visualization of this pathology, we applied three-dimensional transesophageal echocardiography (3D TEE) full volume data set, which revealed morphological features of this pathology in detail (Fig. 2, all panels). Interatrial septum was 20 mm in thickness and dumb bell-shaped morphology. There was no obstruction in inferior and superior vena cava (Fig. 2A, Video 1. See corresponding video/movie images at www.anakarder.com) and no involvement of the fossa ovalis



Figure 1. Two-dimensional transthoracic echocardiography (2D TTE) in bicaval view (1A) and short-axis (1B) views of lipomatous hypertrophy of the interatrial septum

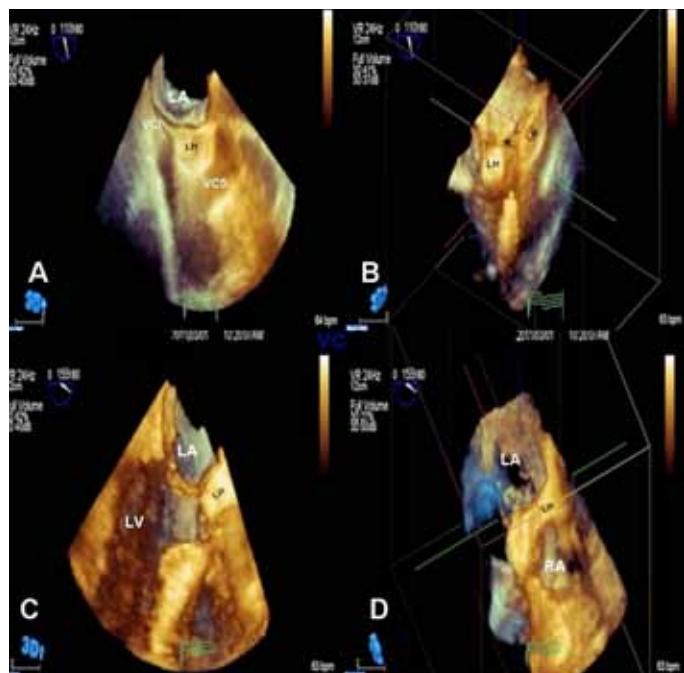


Figure 2. Three-dimensional transesophageal echocardiography (3D TEE) features of lipomatous hypertrophy of the interatrial septum. No obstruction in inferior and superior vena cava (2A) and no involvement of the fossa ovalis (2B, asterisk) are seen

(Fig. 2B, Video 2. See corresponding video/movie images at www.anakarder.com). Three-dimensional transesophageal echocardiography can be used to visualize the morphological features of LHAS and to reveal its relationship with adjacent tissues.

Video 1: Three-dimensional transesophageal echocardiography (3D TEE) features of lipomatous hypertrophy of the interatrial septum. No obstruction in inferior and superior vena cava is seen

Video 2: Three-dimensional transesophageal echocardiography (3D TEE) features of lipomatous

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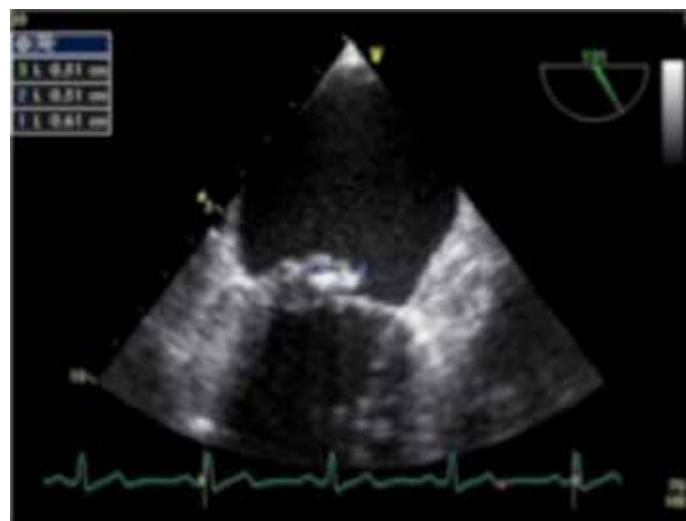
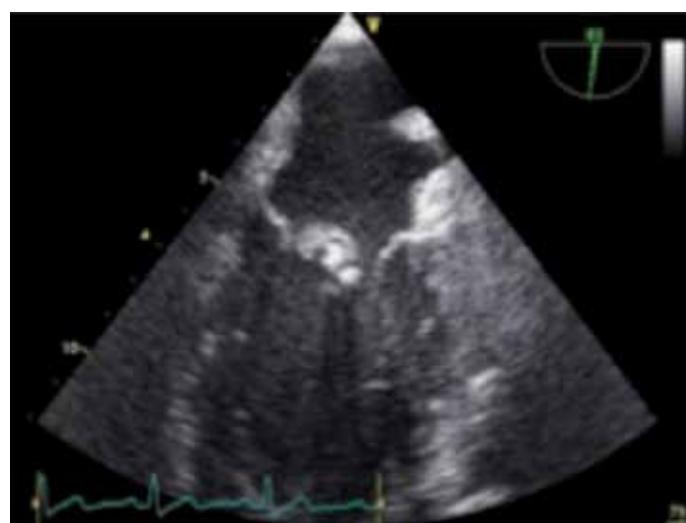
Mitral kapakta prolapsa bağlı yalancı kitle görünümü



Mitral valve prolapse with mass-like appearance

İç hastalıkları kliniğine nefes darlığı, karında şişkinlik ve ağız açısu gelme şikayetiyle 62 yaşında erkek hasta başvurdu. Hastanın son 6 ay

îçerisinde 8 kg kilo kaybının olması üzerine hastaya üst gastrointestinal endoskopu planlandı. Hastaya yapılan üst gastrointestinal endoskopı sonucunda hastada evre 1 özefagus kanseri saptandı ve hastaya cerrahi operasyon planlandı. Hastanın nefes darlığı şikayetlerinin olması nedeniyle preop kardiyak değerlendirme istendi. Özgeçmişinde; bilinen hipertansiyon hikayesi olan hasta, sadece ramipril 5 mg tb kullanmaktadır. Hastanın soy geçmişinde bir özellik yoktu. Fizik muayenesinde tansiyon değeri 140/80 mmHg, nabız sayısı 80/dk ritmik, oskültasyonda apikal bölgede 3/6 pansistolik üfürüm duyuldu. Hastanın elektrokardiografisinde herhangi bir patolojik bulgu izlenmedi. Hastanın yapılan transtorasik ekokardiyografisinde apikal dört boşluk görüntülemeye, mitral kapak posterior yapraklıının ekojenitesi artmış kitle imajı izlenmeye olup, ileri seviyede mitral yetersizliğine neden olduğu saptandı (Video 1, 2). Kitlenin daha iyi değerlendirilmesi amacıyla yapılan transözefagial ekokardiyografi midözefagial görüntülemede, posterior yapraklıının ekojenitesi artmış kitle imajı izlenmeye olup, ileri düzeye mitral yetersizliğine neden olduğu izlendi (Şekil 1, 2), (Video 3-6). Bilinen özefagus kanseri hikayesi bulunan hastanın mitral kapaktaki kitle imajının ön planda metastaz ya da primer kardiyak tümörü düşündürmesi nedeniyle, hasta kalp damar cerrahisi ile değerlendirilerek operasyona alındı. Operasyon sonucunda hastanın mitral kapağındaki mevcut görünümün mitral kapaktaki miksomatöz değişikliklere ve nodüler kalınlaşmaya bağlı olduğu saptandı (Şekil 3). Hastanın mitral kapağındaki prolabe olan skallopun eksizyonu ile mitral kapak tamiri başarıyla sonuçlan-



Şekil 1, 2. Midösafial görüntülemede mitral kapak posterior yapraklıının ekojenitesi artmış kitle imajı izlenmektedir