

pseudoaneurysm of the MAIF was diagnosed on the posterior aspect of aortic valve with direct connection to LVOT and left atrium (Fig. 1, Video 1. See corresponding video/movie images at www.anakarder.com). The wall of the pseudoaneurysm was partially composed of pericardial patch and perforated segment of the patch was clearly seen from the left atrial aspect on 3D TEE (Fig. 2, Video 2. See corresponding video/movie images at www.anakarder.com). The anterior border of the P-MAIF was in direct continuation with anterior mitral leaflet (Fig. 3, Video 3 and 4. See corresponding video/movie images at www.anakarder.com). Moderate mitral regurgitation was established due to the perforation of anterior mitral leaflet with these findings re-operation was planned. Unfortunately the patient rejected re-operation and was discharged with warfarin therapy.

Video 1. The transesophageal echocardiography shows a pseudoaneurysm, ranging to the left atrium from aorta (arrows)

Video 2. Three-dimensional (3D) transesophageal echocardiography visualization of the ruptured pseudoaneurysm

Video 3. 3D TEE atrial side view of the pseudoaneurysm, showing direct continuation mitral anterior leaflet with pseudoaneurysm

TEE - transesophageal echocardiography

Video 4. 3D TEE long-axis view of the pseudoaneurysm

TEE - transesophageal echocardiography

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Cor triatriatum sinister demonstrated by 3D-transesophageal echocardiography

Üç boyutlu transözefageal ekokardiyografi ile gösterilen kor triatriatum sinisterum

A 25-year-old asymptomatic patient was referred to our institution for the assessment of an apical 2/6 diastolic murmur. The transthoracic echocardiography (TTE) revealed a membrane-like structure, separating the left atrium into two compartments (Fig. 1 A). There was a connection between the compartments in the color Doppler examination (see, figure Fig.1 B and Video 1. See corresponding video/movie images at www.anakarder.com). The estimated systolic pulmonary artery pressure from the tricuspid regurgitation flow was 35 mmHg. On two-dimensional transesophageal echocardiography (TEE), these two cham-

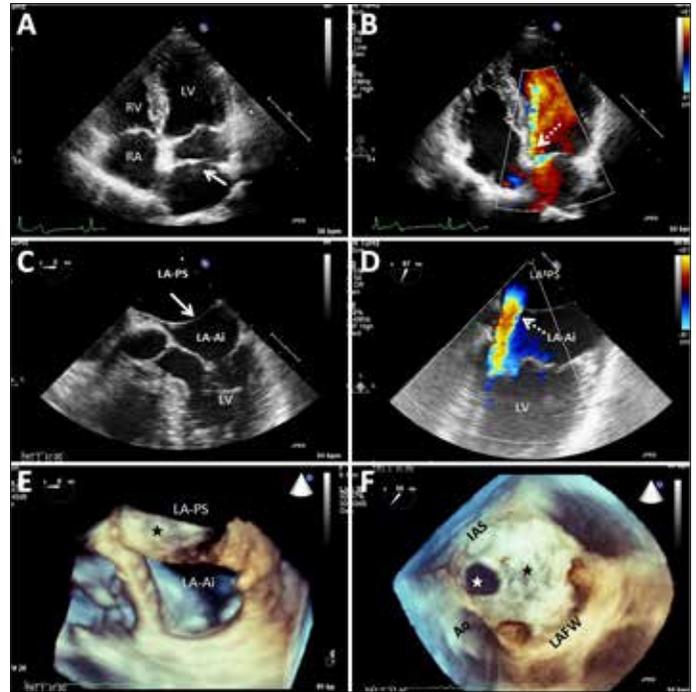


Figure 1. Two-dimensional TTE (A) and TEE (C) images show the membrane (arrows) dividing the left atrium into two chambers. 2D TTE (B) and TEE (D) Color Doppler studies revealed a single small fenestration (dotted arrows) on the membrane. 3D TEE image reconstruction (E and F) demonstrated the membrane (black stars) with a single, circular orifice/circular shaped defect (white star) located close to interatrial septum. The measured diameter was 13 mm, and the calculated area was 1.35 cm²

Ao - aorta, IAS - interatrial septum, LA - left atrium, LA-AI - antero-inferior chamber, LA-PS - postero-superior chamber, LAFW - left atrial free wall, LV - left ventricle, RA - right atrium, RV - right ventricle, TEE - transesophageal echocardiography, TTE - transthoracic echocardiography

bers were seen as antero-inferior and postero-superiorly located and connected via a small fenestration of 10 mm diameter on the membrane. A mean gradient of 6 mmHg was calculated through the membrane with pulsed Doppler study (Fig. 1, CD and Video 2. See corresponding video/movie images at www.anakarder.com). A following three-dimensional TEE demonstrated the anatomy of the membrane more detailed with the location, shape and size of its fenestration (Fig. 1 E, F and Video 3. See corresponding video/movie images at www.anakarder.com). As the patient had no additional cardiac abnormality, a medical follow-up decision was made.

Cor triatriatum sinister is a rarely seen congenital abnormality. It is often detected and corrected in the childhood when it becomes symptomatic. The left atrium is divided into antero-inferior and postero-superior compartments with a fibrous or fibromuscular fenestrated membrane. Importantly, the number and the size of the fenestrations determine the symptomatology and the need for intervention. When compared with 2D imaging, 3D TEE enables a more accurate data about the anatomy and the structure of the membrane and its fenestrations.

Video 1. Transthoracic apical 4-chamber view (left panel) shows the membrane dividing the left atrium into two chambers. Color Doppler study (right panel) reveals a single small fenestration on the membrane

Video 2. Transesophageal 2D (left panel) and color Doppler (right panel) studies show the membrane dividing the left atrium into two chambers and a single small fenestration on the membrane

Video 3. 3D TEE image with left atrial perspective demonstrated the membrane

3D TEE – three-dimensional transesophageal echocardiography

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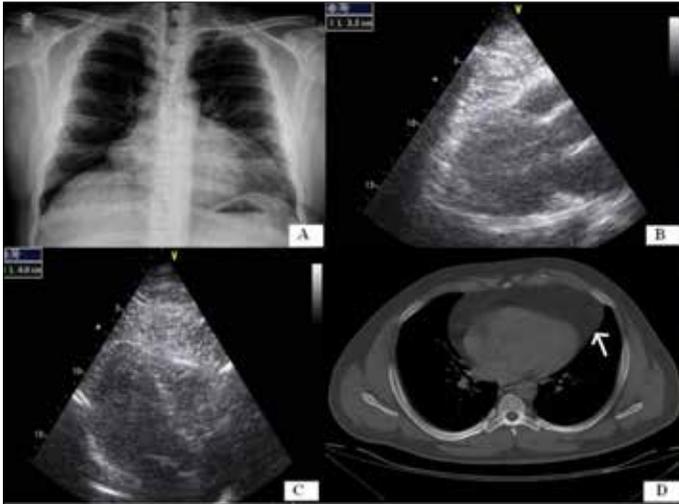
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Tesadüfen tanı konulan olağan dışı büyük epikardiyal yağ dokusu



Incidentally diagnosed unusual large epicardial adipose tissue

Otuz üç yaşında erkek hastaya atıtipik göğüs ağrısı yakınması için çekilen akciğer grafisinde kalp gölgesinin geniş görülmesi (Resim 1A) nedeniyle hastanemize sevk edildi. Hastanın fizik muayenede her iki koldan tansiyonu 130/85 mmHg, vücut kitle indeksi 33.08 kg/m² (aşırı kilolu), bel çevresi 110 cm olarak ölçüldü. Açlık kan şekeri: 110 mg/dL, trigliserid düzeyi: 560 mg/dL, HDL-kolesterol düzeyi: 30 mg/dL, LDL-kolesterol düzeyi: 137 mg/dL, aspartat aminotransferaz (AST): 30U/L, alanin aminotransferaz (ALT): 33U/L, hemoglobin: 15.4 g/dL, trombosit: 323.000 mm³, sedimantasyon: 2 mm/saat HsCRP: 4mg/L olarak saptandı.



Resim 1. Hastanın akciğer grafisinde (A) göze çarpan kardiyomegali-nin transtorasik ekokardiyografi ile incelenmesinde parasternal uzun eksen (B) ve apikal (C) pencerede kardiyomegali nedeni olarak sadece kalın epikardiyal yağ dokusu saptandı. Bilgisayarlı tomografide (D) ise bu yağ dokusunun dağılımı görülmekte

Kalbin perikardiyal sınırında, sağ ventrikül komşuluğunda 40 mm'ye ulaşan yağ dokusu ile uyumlu ekojenite izlendi (Resim 1B, C ve Video 1. Video/hareketli görüntüler www.anakarder.com'da izlenebilir). Bilgisayarlı tomografi incelemesinde en kalın yeri (45 mm) sağ ventrikül ön yüzünde bulunan ve sağ atriyum komşuluğuna da yayılan hipodens yağ dokusu saptandı (Resim 1D, ok işareti). Efor testinde 10 METs efor yapan hastanın batın ultrasonografide grade II karaciğer yağlanması izlendi ve trigliserid değerlerinin yüksek olması nedeniyle fenofibrat tedavisi başlanarak takip altına alındı.

Metabolik sendromlu hastalarda epikardiyal yağ doku kalınlığı ile kardiyovasküler mortalite arasında yakın ilişki olduğu bilinmektedir ve bu nedenle olgumuz literatürdeki en kalın epikardiyal dokusuna sahip olarak yüksek risk taşımaktadır. Epikardiyal yağ dokusuna eşlik edebilecek ilave durumlar da (Morgagni hernisi gibi) özellikle tomografik inceleme ile değerlendirilmelidir.

Video 1. Ekokardiyografi ile izlenen kalın epikardiyal yağ dokusu

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Very late diagnosed complication of coronary artery bypass surgery: coronary artery to right ventricular fistula



Koroner baypas cerrahisinin geç tanı konmuş bir komplikasyonu: Koroner arter ile sağ ventrikül arası fistül

A 59-year-old male patient was admitted to our clinic with Class 2-3 angina. In medical history, he had undergone coronary artery bypass surgery 23 years ago. Auscultation revealed a continuous murmur with a louder diastolic component at the left mid sternal border. In parasternal long- and short-axis views, color Doppler echocardiography demonstrated a turbulent flow between left ventricle and right ventricle (Fig. 1, 2, Video 1 and 2. See corresponding video/movie images at www.anakarder.com). Although this flow resembled ventricular septal defect (VSD) in some points, VSD was not considered as a possible diagnosis owing to patient's complaint, history and physical examination were not relevant with VSD. Spectral Doppler evaluation revealed a continuous flow with diastolic accentuation (Fig. 3). This flow pattern and