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"Lovely Heart" on echocardiography: An unusual left ventricular pseudoaneurysm diagnosed incidentally

Ekokardiyografide "Aşk Kalbi": Nadir rastlanan tesadüfen tanı konulan bir sol ventrikül psödoanevrizma olgusu

A-52-year old male patient, with a history of coronary bypass surgery (CABG) operation 2 years ago, was referred to our clinic for routine control. An echocardiography showed anterior segment hypokinesia and an aneurysmal sac communicating to posterolateral basal segment of the left ventricle (LV). LV ejection fraction was found reduced (42% by modified Simpson's method). Interestingly in apical long -axis view the LV had the shape of "lovely heart" (Fig. 1A and Video 1). Short- axis view showed two apex-like appearance (true and false apex) that clearly displayed dyskinesia of the pseudoaneurysm (Fig. 1B, C and Video 2-3). Computed tomography (CT) angiography was performed and showed thrombus formation inside the pseudoaneurysm (Fig. 1D). A 3D reconstruction of cardiac CT angiography allowed better understanding the nature of the pseudoaneurysm (Fig. 1E, F).

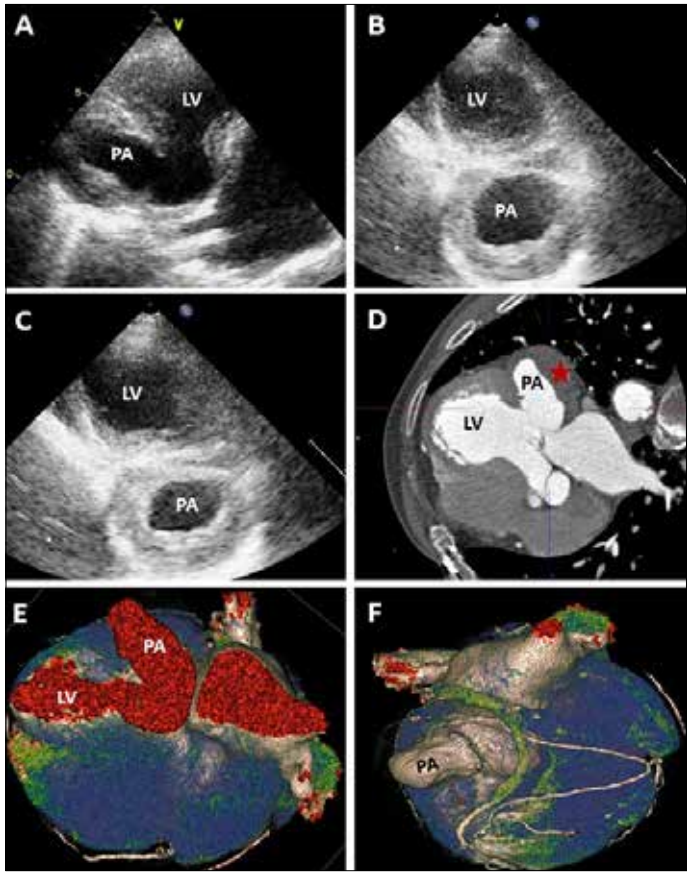

Figure 1. A) Apical long -axis view showing the shape of "lovely heart". B-C) Parasternal short -axis view showing dyskinesia. D) CT Angiography showing thrombus formation in the pseudoaneurysm. E-F) 3D reconstruction of cardiac CT Angiography

CT - computed tomography, LV - left ventricle, PA - pseudoaneurysm
Red Star: Thrombus

LV pseudoaneurysm should be treated surgically because of high rupture risk. Surgery was recommended to the patient but he declined to undergo surgery and medical follow up was initiated.

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Video 1. Parasternal short axis view showing dyskinesia
Video 2. Apical long- axis view showing the shape of "lovely heart"
Video 3. Modified apical long- axis view showing the shape of "lovely heart"

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Multimodality imaging of type 4 persistent truncus arteriosus in an adult patient

Yetişkin bir hastada tip 4 kalıcı trunkus arteriyozusun çoklu görüntülenmesi

A 23-year-old woman was referred to our outpatient clinic with dyspnea and palpitation. Physical examination revealed cyanosis, clubbed fingers and jugular venous congestion.

Transthoracic echocardiography showed ventricular septal defect (VSD) and overriding aorta. Two-dimensional transesophageal echocardiography showed VSD, right ventricular hypertrophy (Fig. 1A), aortic regurgitation, dilated coronary sinus (Fig. 1B and Video 1A See corresponding video/movie images at www.anakarder.com) and absence of pulmonary valve (Fig. 1C and Video 1B See corresponding video/movie images at www.anakarder.com). Oblique sagittal multiplanar reconstruction (MPR) computed tomography (CT) confirmed VSD, overriding aorta, right ventricular hypertrophy, persistent left superior vena cava (PLSVC, arrow) and pulmonary atresia (PA) (Fig. 1D). Colored three-dimensional volume rendered CT image demonstrated a large truncus arteriosus (TA) arising from the base of the heart (Fig. 1E) and a very large major aortopulmonary collateral artery (MAPCA) originating from the junction of the ascending aorta and aortic arch then dividing right and left pulmonary artery to supply the vasculature of the lung (Fig. 1F).

The coexistence of PA and VSD varies from simple to complex. In its more complex form the main pulmonary artery is atresia, and some or all of the lung parenchyma is instead supplied by collateral arteries arising from the descending thoracic aorta or its major branches. However, MAPCA was arising from the junction of the ascending aorta and aortic arch in our case. Blood leaving the right ventricle mixes with left ventricular output through the overriding aortic valve, and creates both the pulmonic and systemic circulations. This is similar to type 4 persistent truncus arteriosus. We herein presented a case of tip 4 TA associated with PA, VSD, overriding aorta and PLSVC in an adult patient.

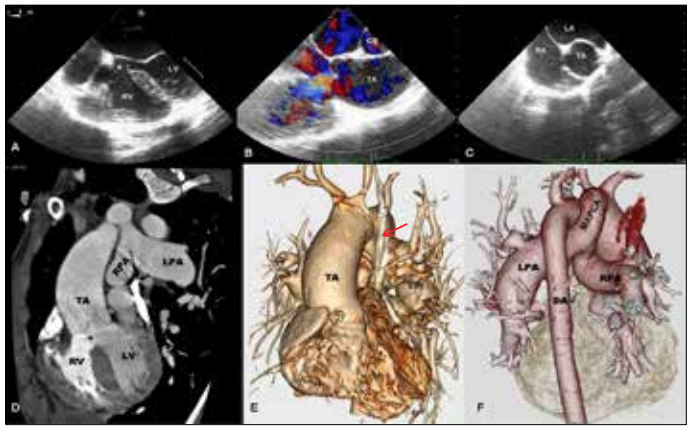

Figure 1. Two-dimensional transesophageal echocardiography images of ventricular septal defect (VSD), right ventricular hypertrophy (A), aortic regurgitation, dilated coronary sinus (B) and absence of pulmonary valve (C). Oblique sagittal MPR computed tomography (CT) confirmed VSD, overriding aorta, right ventricular hypertrophy, persistent left superior vena cava (PLSVC, arrow) and pulmonary atresia (PA) (D). Colored three-dimensional volume rendered CT image demonstrated a large truncus arteriosus (TA) arising from the base of the heart (E) and a very large major aortopulmonary collateral artery originating from the junction of the ascending aorta and aortic arch then dividing right and left pulmonary artery to supply the vasculature of the lung (F)

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Video 1. A) Two-dimensional transesophageal echocardiography revealed aortic regurgitation and dilated coronary sinus. B) Two-dimensional transesophageal echocardiography showed the absence of pulmonary valve

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Successful extraction of broken pacemaker leads by using a snare-loop device and radiofrequency ablation catheter

Kırık pacemaker elektrotlarının snare-loop cihazı ve radyofrekans ablasyon kateteri kullanılarak başarılı ekstraksiyonu

A total extraction of biventricular-ICD (implantable cardioverter defibrillator) system from the left side was planned in 64 -year-old female patient with a pacemaker infection. She was admitted laboratory and pulse generator was easily extracted. Atrial lead was also easily extracted but the coronary sinus (CS) and right ventricular (RV) ICD leads were broken from their proximal ends. Attempts to reach and hold the proximal ends of the broken CS and RV leads were failed. Then, it was decided to remove these leads by using the snare-loop device. After insertion of a 7 French sheath introducer to right femoral vein (RFV), the snare-loop device was sent to left subclavian vein. However, we failed to reach and grab the free ends of the leads within the left subclavian vein. Then another 7 French sheath introducer was inserted to RFV and a Sones catheter was sent to the right atrium. The Sones catheter was rotated around the CS lead and lead was pulled down. Therefore the CS lead's proximal and distal ends became free in the right atrium. Then the CS lead was entrapped by the

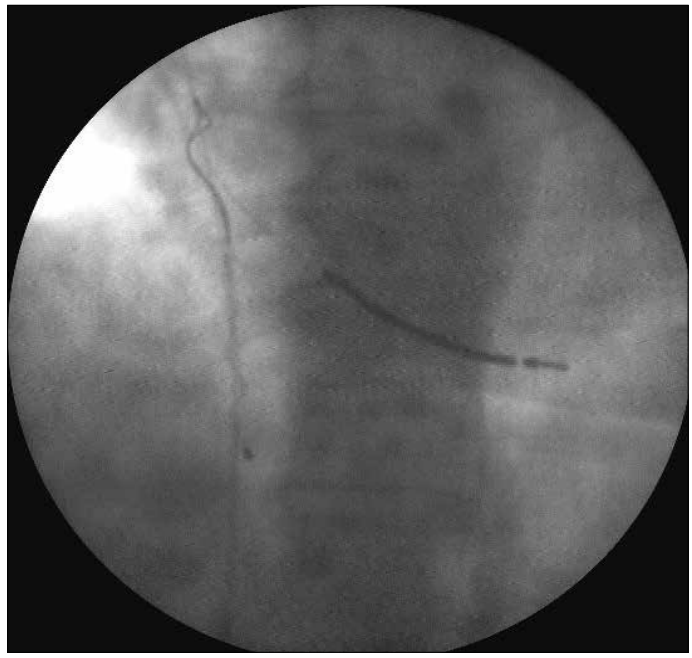

Figure 1. Grabbing and extraction of coronary sinus lead by snare-loop device

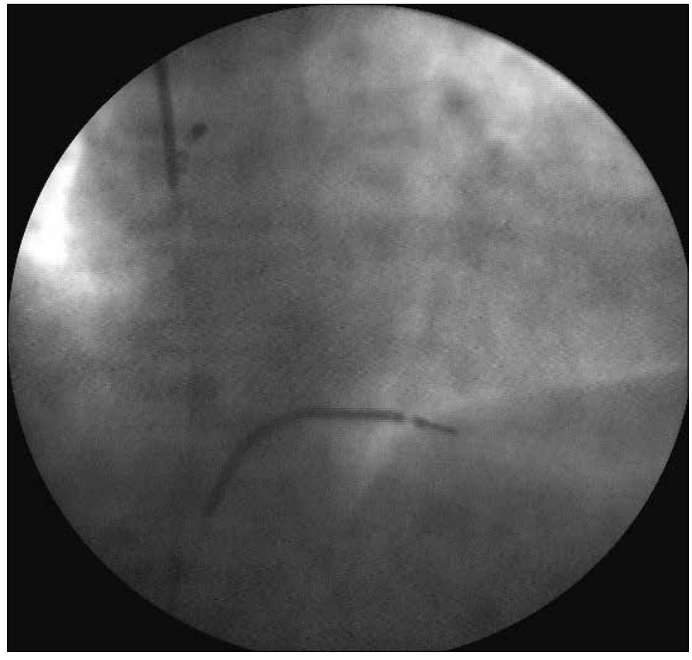

Figure 2. Extraction of right ventricular lead by using the radiofrequency ablation catheter and snare-loop device