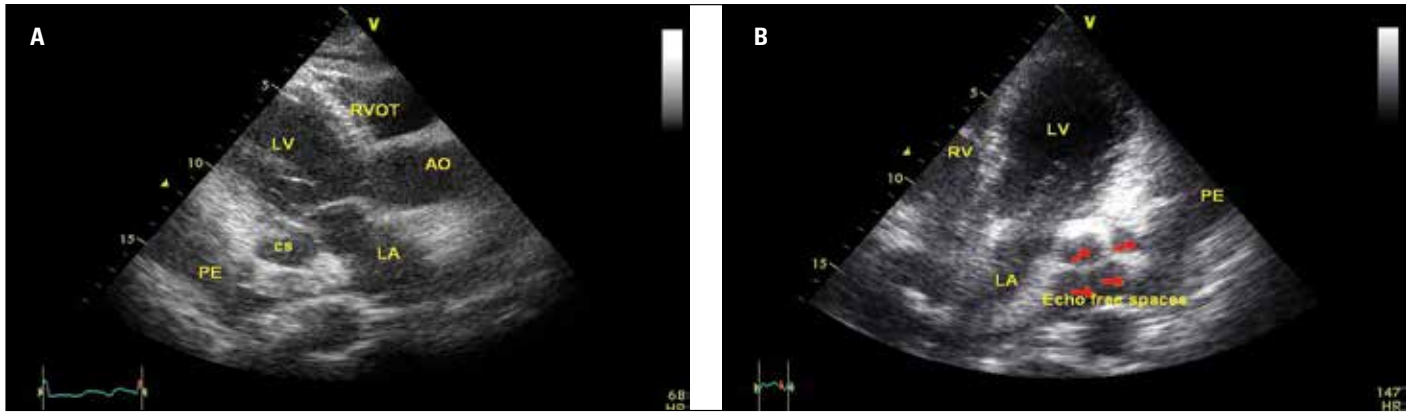

Figure 1. A) Transthoracic echocardiographic images. Parasternal long-axis view (A) showed massive pericardial effusion and marked dilatation of the coronary sinus (CS), and multiple echo-free spaces (arrowheads) around atrioventricular groove (B)

Ao - indicates aorta, LA - left atrium, LV - left ventricle, RVOT - right ventricular outflow tract, PE -pericardial effusion

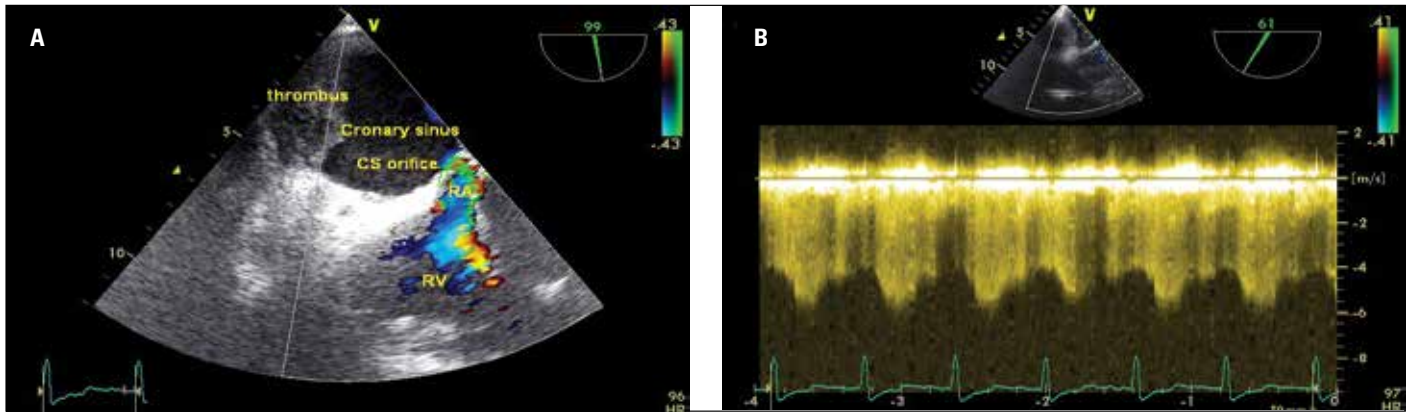

Figure 2. Transesophageal echocardiographic images: showing aneurysmal dilatation of the coronary sinus (CS), which is partially occluded by the thrombus and significant stenosis of its orifice with turbulent flow is seen (A). Continuous wave Doppler showed high velocity continuous Doppler signal (B)

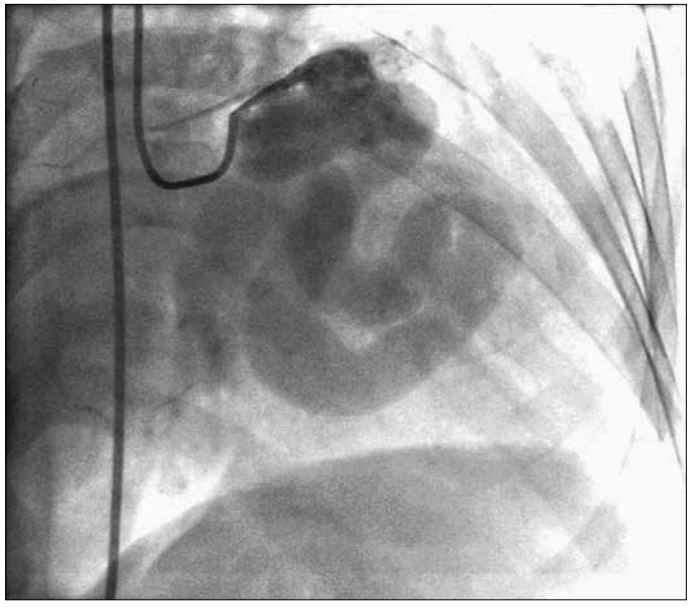

Figure 3. Coronary angiography scene showing severe dilation and tortuosity of left circumflex artery. Coronary sinus was revealed in delayed frames

Giant left atrial myxoma with left and right coronary system blood supply accompanying mitral stenosis; real-time three- dimensional echocardiography imaging

Mitral darlığa eşlik eden sol ve sağ koroner sistemin beslediği büyük sol atriyal miksoma; gerçek zaman üç boyutlu ekokardiyografi kullanımı

A 52-year-old woman was referred to our institution due to her specific symptoms such as typical chest pain, and exertional dyspnea. Chest radiography revealed a hypodense area on the left border of sternum (Fig. 1). Transthoracic echocardiographic (TTE) two-and three dimensional examination detected a hyperechoic, globular, large mass occupying almost the entire the left atrium (Fig. 2A, B). The mass protrude across the mitral valve into the left ventricle (LV) during diastole causing 5 mm Hg left ventricular inflow mean diastolic gradient. Mild mitral functional stenosis was present. Then, to confirm a diagnosis patient underwent transesophageal two- and tree- dimensional echocardiography (TEE). It revealed a huge mass hyperecho-

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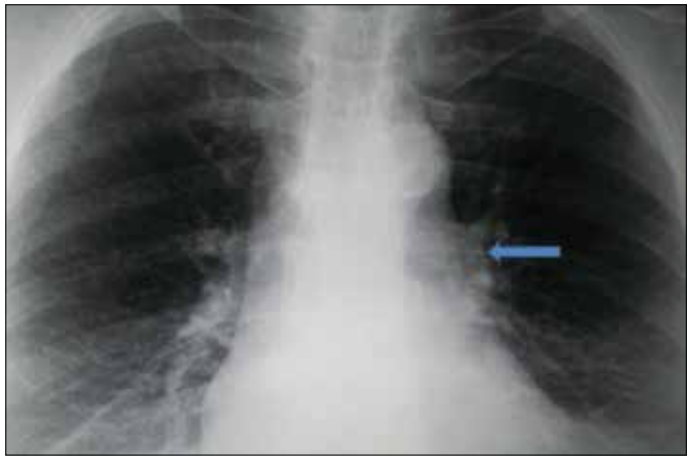

Figure 1. Chest radiography view of a hypodense area on the left border of sternum

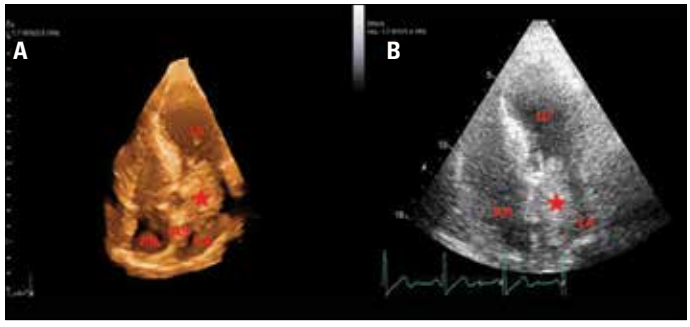

Figure 2. A) Two-and B) three-dimensional transthoracic echocardiographic examination detected a large mass occupying almost the entire the left atrium

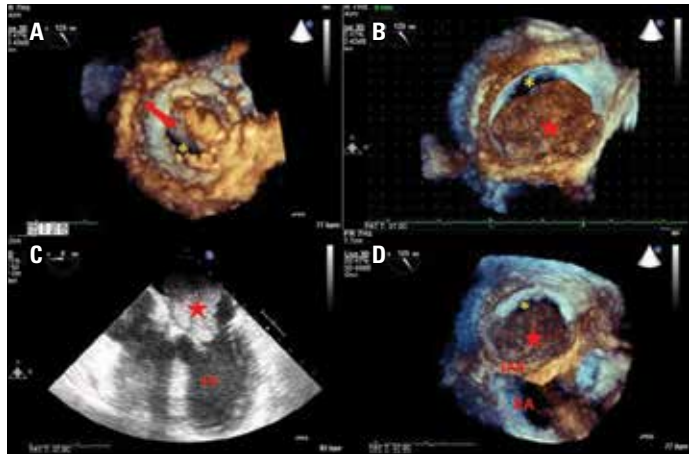

Figure 3. A, B, C, D) Two-and three-dimensional transesophageal echocardiography allowed to accurately imaging the entire volume of the myxoma (arrow,★), and to analyze the dynamic left ventricular inflow obstruction (*)

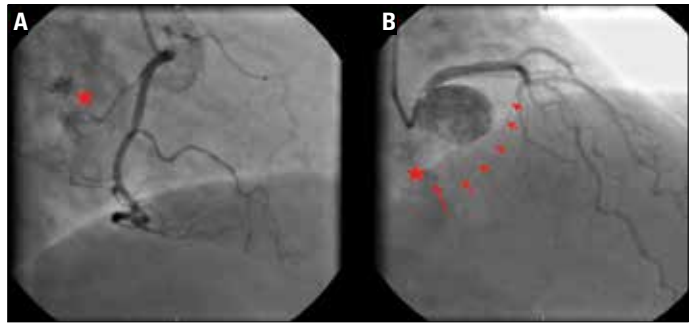

Figure 4. Angiography views of the neovascularization (arrow) of the myxoma (★) by both right A) and left circumflex coronary artery B)

Figure 5. Intraoperative view of myxoma (A). Left atrial myxoma after surgery (B). Microscopy showing myxoma cells dispersed throughout the myxoid stroma (C)

genic, heterogeneous, and lobulated attached to the fossa ovalis part of interatrial septum. Part of the mass prolapsed through the mitral valve to the left ventricle during the atrial systole (Fig. 3A-D, Video 1-3. See corresponding video/movie images at www.anakarder.com). Because of her symptoms and age, we performed coronary angiography to exclude coronary artery disease before surgery. Angiography revealed significant left anterior descending artery stenosis with neovascularization of the myxoma by both left circumflex artery and right coronary artery (Fig. 4A, B). Mass resection and bypass surgery was successfully performed (Fig. 5A, B). Histological examination of the excised mass revealed an atrial myxoma that consisted of mixed stroma (Fig. 5C). Real-time three-dimensional echocardiography (RT3DE) imaging allowed accurate measurements in multiple planes of the entire volume of a mass, and real-time evaluation of obstructive effects on ventricular inflow. This case shows how RT3DE may be used as a complementary technique for evaluation of intracardiac masses.

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Video 1. Transesophageal two dimensional echocardiography
Video 2. Transesophageal three- dimensional echocardiography (ventricle side)
Video 3. Transesophageal three-dimensional echocardiography (atrium side)
IAS - interatrial septum, LA - left atrium, LV - left ventricle, RA - right atrium

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Available Online Date/Çevrimiçi Yayın Tarihi: 29.05.2013

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doi:10.5152/akd.2013.163

Crossed pulmonary arteries associated with persistent truncus arteriosus and right aortic arch on the three-dimensional computed tomographic imaging

Üç boyutlu bilgisayarlı tomografik görüntülemede persistan trunkus arteriyozus ve sağ aortik arkus ile ilişkili çaprazlaşan pulmoner arterler

A 33-year-old gravida 2, para 1 woman was referred to our pediatric cardiology unit at the 19th week of gestation with suspicion of cardiac anomaly. Fetal echocardiography revealed type 1 truncus arteriosus and right aortic arch. A female infant weighing 3200 gram was delivered at 38th week of gestation. Her cardiac pathology was confirmed by postnatal echocardiography. Moreover, we suspected crossed pulmonary arteries, because the pulmonary bifurcation was not shown by two-dimensional echocardiography. A three dimensional (3D) contrast-enhanced 64-multislice computed tomography (MSCT) revealed crossed pulmonary arteries. The main pulmonary artery arose from the posterior aspect of the truncus and the ostium of the left pulmonary artery was lying to the right and superior to the right pulmonary artery (Fig. 1, 2).

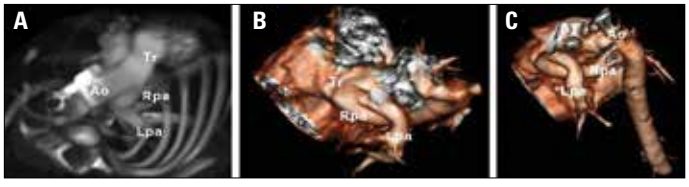

Figure 1. A MSCT image of the crossed pulmonary arteries, B 3D-MSCT image from left posterior view demonstrating the truncus arteriosus and the crossed pulmonary arteries, C 3D-MSCT image from posterior view demonstrating the crossed pulmonary arteries
Des A - descending aort, Lpa - left pulmonary artery, MSCT - multislice computed tomography, Rpa - right pulmonary artery, Tr - truncus

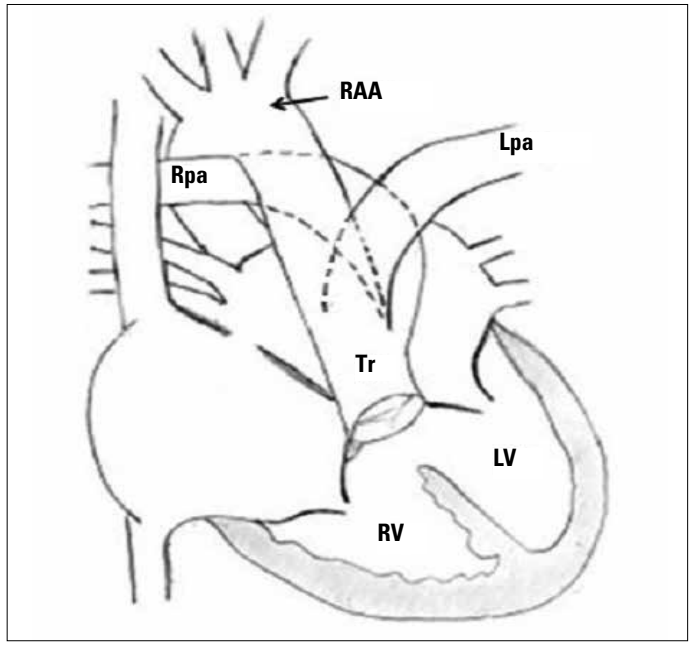

Figure 2. Schematic drawing of crossed pulmonary arteries with persistent truncus arteriosus
LV - left ventricle, RV - right ventricle

Crossed pulmonary arteries are a rare cardiac abnormality that often associates with congenital heart disease such as ventricular septal defect, right aortic arch, interrupted aortic arch and truncus arteriosus and chromosomal abnormalities such as chromosome 22q11 deletion. Detection of crossed pulmonary arteries may be an important marker to the diagnosis of cardiac and chromosomal abnormalities. The failure of imaging bifurcation of the pulmonary arteries on echocardiography might be a clue for the diagnosis of crossed pulmonary arteries.

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doi:10.5152/akd.2013.164