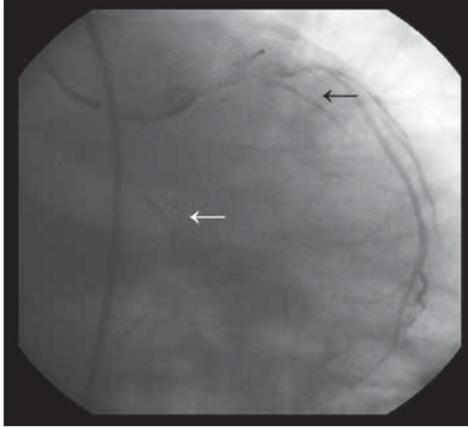


## Triple right coronary artery accompanied by an ectopic circumflex artery arising from right sinus of Valsalva

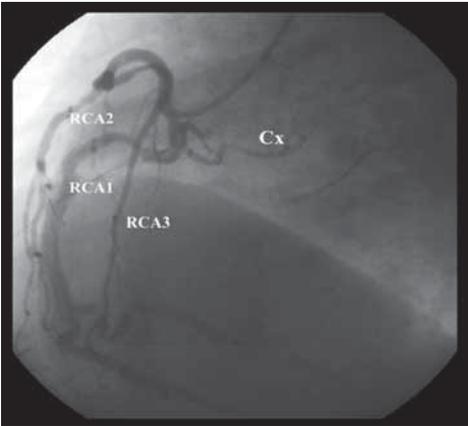
*Üçlü sağ koroner artere eşlik eden sağ sinüs Valsalva kökenli ektopik sirkumfleks arter*

A 41-year-old man with acute anterior myocardial infarction underwent early coronary angiography after thrombolytic therapy. Selective left coronary arteriography revealed a left anterior descending artery (LAD) with compromised opacification and an obtuse margin (OM) artery (opacified by collateral flow) (Fig. 1). The circumflex artery (Cx) was not visualized in the usual location. The right coronary arteriography demonstrated a triple right coronary artery (RCA) and an ectopic Cx artery arising from right sinus of Valsalva and giving off the severely stenotic OM artery (Fig. 2, 3). One of the RCAs (RCA1) followed the course of atrioventricular groove and terminated by giving off the posterior



**Figure 1. Selective left coronary angiography demonstrating the absence of Cx, compromised opacification of LAD (black arrow) and opacification of OM (white arrow) by the collateral flow (right anterior oblique view)**

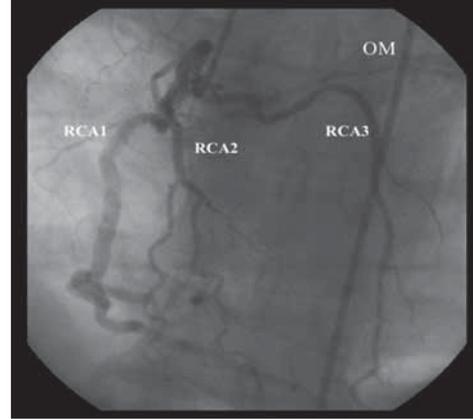
Cx - circumflex artery, LAD - left anterior descending artery, OM - obtuse margin artery



**Figure 2. Selective right coronary angiography demonstrating the ectopic Cx and the triplication pattern of RCA (left anterior oblique view)**

Cx - circumflex artery, RCA - right coronary artery

descending artery. The other RCA (RCA2) was found to arise from a separate ostium in the right sinus of Valsalva and run parallel to RCA1. The right coronary artery was also found to give rise to another RCA (RCA3) about 2 cm downstream. Multiple RCA with or without ectopic origin of coronary arteries is an extremely uncommon anomaly. Even though the clinical significance of double or triple RCA is still obscure, angiologists and surgeons should be familiar with this rare entity.



**Figure 3. Selective right coronary angiography demonstrating the severely stenotic OM and the triplication pattern of RCA (cranial view)**

RCA - right coronary artery, OM - obtuse marginal branch

**Kenan Yalta, Osman Can Yontar, Mehmet Birhan Yılmaz, Alim Erdem, Okan Onur Turgut, Ahmet Yılmaz, Şinasi Manduz\*, İzzet Tandoğan**  
From Departments of Cardiology and \*Cardiovascular Surgery, Faculty of Medicine, Cumhuriyet University, Sivas, Turkey

**Address for Correspondence/Yazışma Adresi:** Osman Can Yontar, MD, Department of Cardiology, Faculty of Medicine, Cumhuriyet University, Sivas, Turkey  
Phone: +90 346 2264605 Fax: +90 346 258 13 05  
E-mail: o.canyontar@gmail.com  
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## Partial anomalous pulmonary venous return associated with coarctation of the aorta



*Aort koarktasyonu ile birliktelik gösteren parsiyel pulmoner venöz dönüş anomalisi*

A six-year-old male patient was referred to our hospital with the diagnosis of coarctation of aorta. On his physical examination femoral pulses were weak and blood pressure on his right arm was 120/60 mmHg and the blood pressure in the lower extremities was 90/60 mmHg. A 2/6 grade systolic ejection murmur, which was transmitted to the neck, was heard best on the neck between the scapulas and also at the mesocardial region. The electrocardiogram showed right axis deviation and right ventricular hypertrophy. His chest X-ray was normal. Echocardiographic examination revealed mild narrowing of the descending aorta just below

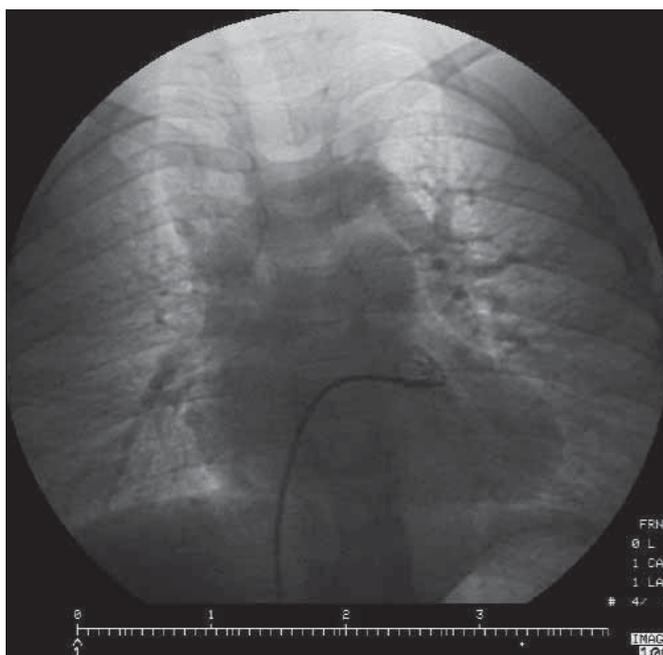
the origin of the left subclavian artery and the left superior pulmonary vein was not demonstrated on the view of suprasternal position. Because of the controversies between the electrocardiogram and diagnosis of the patient cardiac catheterization was performed. Cineangiograms showed a mild narrowing of the descending aorta below the origin of left subclavian artery with a gradient of 22 mmHg and the levogram phase of a right ventricle arteriographic injection confirmed that a single anomalous vein draining the left upper lobe entered the innominate vein (Fig. 1, Video 1. See corresponding video/movie images at [www.anakarder.com](http://www.anakarder.com)). Magnetic resonance angiography was performed for confirming and clarifying the findings of cardiac catheterization (Fig. 2).

Partial anomalous pulmonary venous return can rarely occur with coarctation of the aorta. All reported cases in the literature had multiple

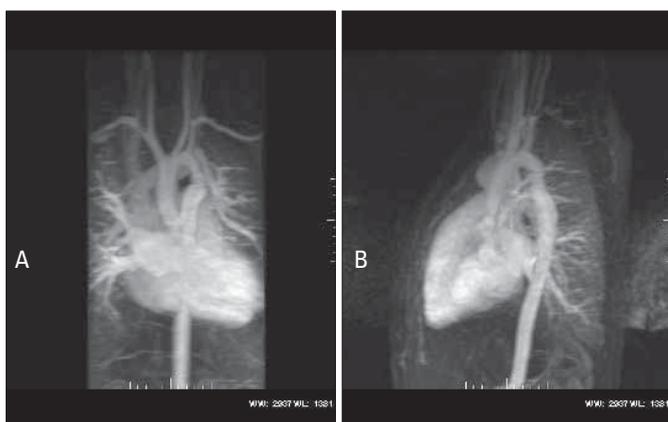
pulmonary venous return anomalies unlike the presented case. In this case, only left upper pulmonary vein draining the left upper lobe and entering the innominate vein was demonstrated.

**Serdar Kula, Cihat Şanlı, Ali Yusuf Öner\*, Rana Olguntürk**  
From Departments of Pediatric Cardiology and \*Radiodiagnostics,  
Faculty of Medicine, Gazi University, Beşevler, Ankara, Turkey

**Address for Correspondence/Yazışma Adresi:** Dr. Serdar Kula,  
Gazi University School of Medicine, Department of Pediatric Cardiology 06500,  
Beşevler, Ankara, Turkey  
Phone: +90 312 202 56 26 Fax: +90 312 212 90 12  
E-mail: [kula@gazi.edu.tr](mailto:kula@gazi.edu.tr)  
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**Figure 1.** Levogram from a right ventricle angiogram demonstrates drainage of left upper lobe by the anomalous pulmonary vein into the vertical vein, which drains into the innominate vein. The other pulmonary veins drain normally into the left atrium

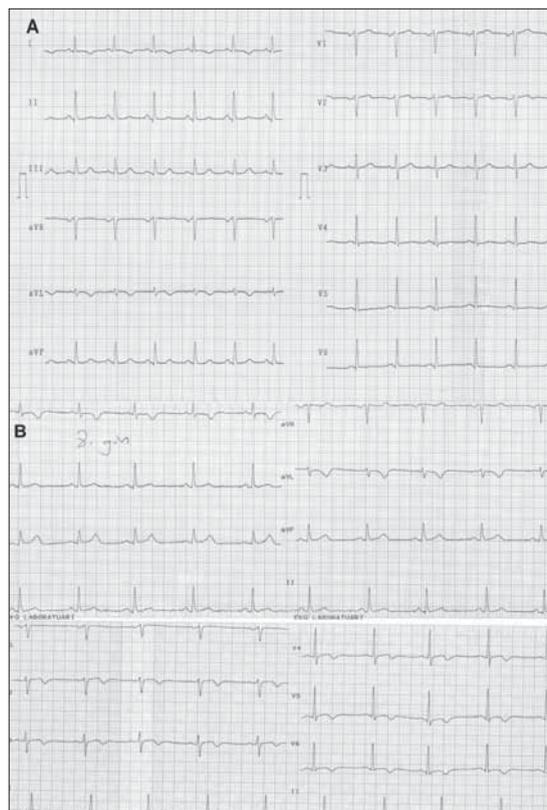


**Figure 2.** Contrast enhanced magnetic resonance angiography images reformatted in the coronal (A) and oblique sagittal planes (B) show an aortic coarctation distal to the left subclavian artery origin. Note also the abnormal drainage of the left superior pulmonary veins to the innominate vein

## Takotsubo cardiomyopathy mimicking acute high lateral myocardial infarction

*Akut yüksek lateral miyokard infarktüsünü taklit eden Takotsubo kardiyomiyopatisi*

A 47-year-old-woman was admitted to emergency department because of severe chest pain of an one hour in duration. The patient had no coronary



**Figure 1.** Electrocardiogram on presentation (A) displays significant for ~ 1mm ST elevation in I and aVL leads, mimicking acute high lateral myocardial infarction. Electrocardiogram on the eighth day (B) showed inverted T waves in precordial leads and I-aVL