

## Percutaneous Coronary Intervention In An Elderly Patient With A Single Coronary Artery

Tek Koroner Arterli Yaşlı Bir Hastaya Perkutan Girişim

**Ahmet Güner<sup>1</sup>, Nuri Havan<sup>2</sup>, Gökhan Alıcı<sup>1</sup>, Elnur Alizade<sup>1</sup>**

1 İstanbul Kartal Koşuyolu Yüksek İhtisas Eğitim ve Araştırma Hastanesi, Kardiyoloji Kliniği, İstanbul

2 İstanbul Kartal Koşuyolu Yüksek İhtisas Eğitim ve Araştırma Hastanesi, Radyoloji Kliniği, İstanbul

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**Uzm. Dr. Ahmet Güner**

İstanbul Kartal Koşuyolu Yüksek İhtisas

Eğitim ve Araştırma Hastanesi,

Kardiyoloji Kliniği, İstanbul

**E-mail:** ahmetguner488@gmail.com

A 70-year-old female patient presented with a history of stable angina pectoris lasting for six months. Myocardial perfusion imaging with Tc 99m-MIBI showed a reversible perfusion defect in inferoseptal wall. Thereupon, the patient was referred for a diagnostic coronary angiography (CA). During CA the ostium of the left main coronary artery could not be cannulated (Fig. A). Cannulation of the right coronary artery (Judkins Right-4 diagnostic catheter) revealed a single coronary artery (SCA) originating from right sinus of Valsalva and giving off branches to both right and left coronary systems which was classified as type-II-B (Lipton's) (Fig. B). A 70% lesion was noted in the circumflex artery (LCx) (Fig. 2). Contrast enhanced cardiac computed tomography (CCT) revealed that the SCA course was between the aorta and pulmonary artery (Fig. C,D ). Percutaneous intervention was performed through a femoral approach using a Judkins Right-4 6F guiding catheter. A 0.014 inch floppy guidewire advanced distally in the LCx and a drug eluting stent with a 2.5x16 mm in size was

implanted successfully (Fig. E). Final image revealed no complications with excellent distal flow (Fig. F). An isolated SCA is a rare congenital anomaly with a benign course in most patients. Nevertheless it may be associated with angina pectoris, syncope and sudden cardiac death. Contrast enhanced CCT and magnetic resonance imaging are very helpful to rule out compression of anomalous coronary arteries coursing between the pulmonary artery and aorta. Moreover, PCI of a SCA is considered high risk intervention due to potentially catastrophic consequences in case of complications such as dissection or thrombosis. Hence, documentation of ischemia and gentle manipulation during PCI should be Standard of care.

**FIGURE**

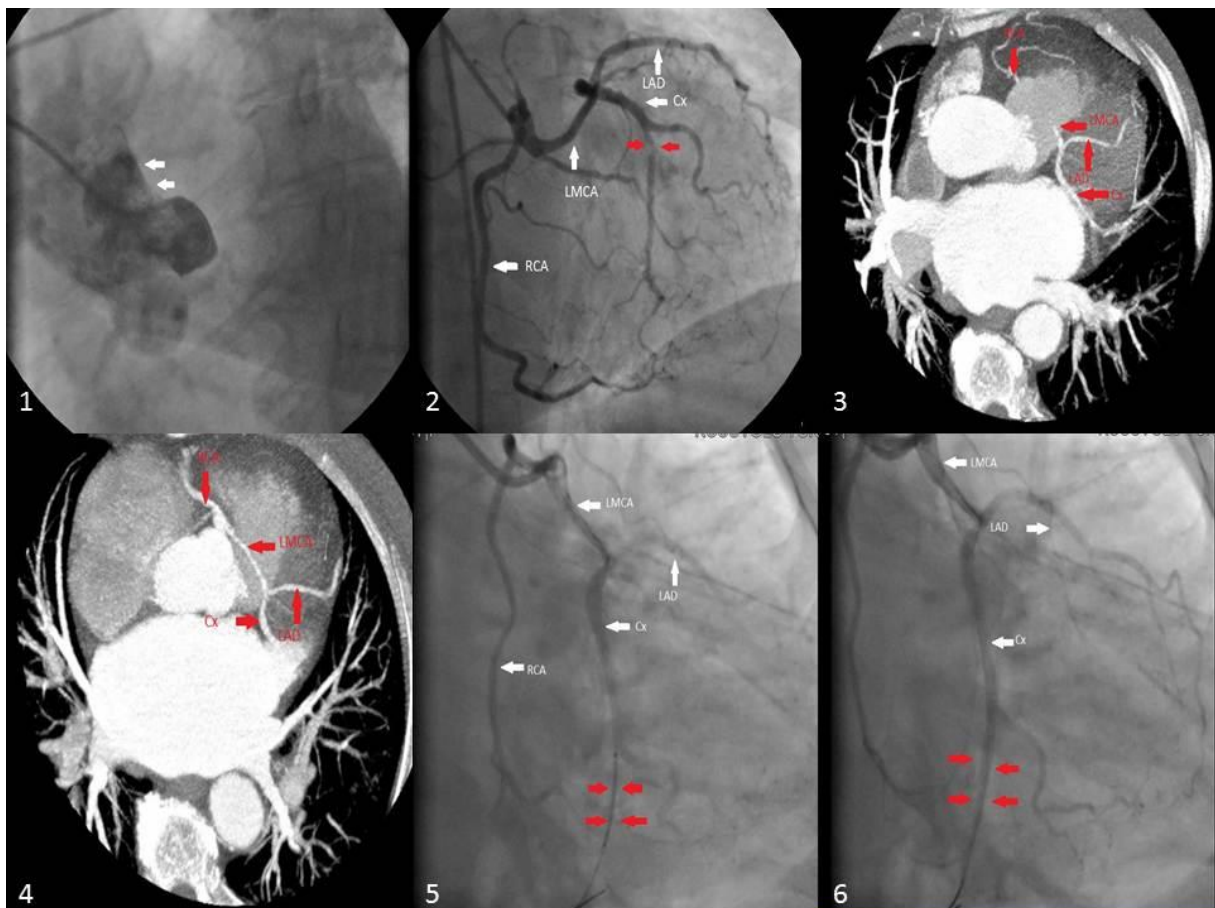


Figure A: Coronary angiography anteroposterior view shows blunt left sinus (arrow) with no coronary origin.

Figure B: Coronary angiography left cranial angiographic view shows both right and left coronaries originating from right sinus and a %70 lesion in the LCx.

Figure C: CT coronary angiography shows LAD and LCx originating from left main.

Figure D: CT coronary angiography coronal axis image shows preaortic course of LMCA.

Figure E: Coronary angiography shows right caudal fluoroscopic view of the LCx during stent deployment.

Figure F: Final angiographic result of the LCx after percutaneous coronary intervention.

LMCA: Left main coronary artery, RCA: Right coronary artery

LCx: Circumflex artery, LAD: Left anterior descending artery