

The longest documented left main coronary artery

Dökümante edilmiş en uzun ana koroner arter

A 63-years old man with hypertension presented to our hospital with a complaint of resting chest pain. The patient was 180 cm high and weighed 100 kg. He was admitted to our clinic with a diagnosis of subacute anterior myocardial infarction. On the fifth day of hospitalization coronary angiography was planned. On coronary angiography, a long left main coronary artery (43 mm in length) was seen (Fig. 1). There were critically discrete stenoses at the proximal segment of left anterior descending coronary artery, at the midportion of the right coronary artery and at the proximal segment of the circumflex artery. On ventriculography the left ventricular sizes were normal, akinesia at the anterior and apical portion of the left ventricle, mild mitral regurgitation were seen. The ejection fraction was measured as 38% and coronary artery bypass graft operation was advised.

The left main coronary artery ranges from 3 to 6 mm in diameter and may be up to 10 to 15 mm in length in humans. In an anatomical study, the longest left main trunk was reported to be 23 mm long. The average length of the left main coronary artery was 10.8 ± 5.52 mm (range=2-23 mm). The longest reported length was 38 mm. We have reported a patient with 43 mm in length left main coronary artery and subacute anterior myocardial infarction.

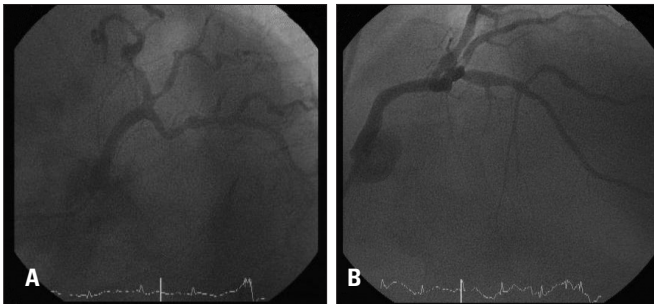


Figure 1. Coronary angiography views (A, B) of a long left main coronary artery and critical occlusion of left anterior descending coronary artery.

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Development of atherosclerosis and in-stent restenosis in an unusual case of dual left anterior descending coronary artery

Ateroskleroz ve stent içi darlık gelişen nadir bir çift sol ön inen koroner arter olgusu

A 77-year-old female was admitted to our hospital with a history of chest pain at rest for one month. In the past medical history, five months

previously she had undergone coronary angiography that demonstrated a type IV dual left anterior descending (LAD) coronary artery. As significant stenosis involving the long LAD and the diagonal artery arising from short LAD coronary artery had been observed, stenting of both lesions had been performed. On this admission, coronary angiography revealed restenosis of both stents (Fig. 1-2). Although the patient had accepted all of the probable interventions before coronary angiography, she refused any revascularization techniques and was discharged two days after angiography with medical treatment.

Dual LAD is a rare congenital coronary artery anomaly. This anomaly is classified into four types. Type IV is described as the presence of two separate LAD arteries, the short LAD arises from the LAD proper, travels in the anterior interventricular sulcus and gives off major septal perforators and diagonal branches. The long LAD is unusual in its origin, arising from the right sinus of Valsalva or right coronary artery. In the anomalous vessels, as for example in our case of dual LAD, acute take off angle or turbulent flow may contribute to the endothelial injury and to the development of coronary artery disease and restenosis.

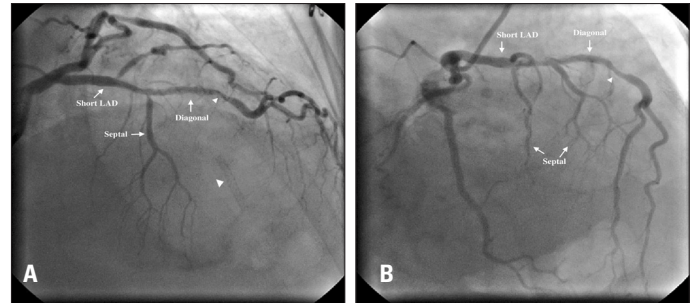


Figure 1. Anteroposterior cranial (A) and right anterior oblique (B) view of selective left main coronary injection. Small arrowhead shows in-segment restenosis of the distal segment of the stent in the second diagonal artery, large arrowhead shows the stent in the long LAD artery
LAD - left anterior descending artery

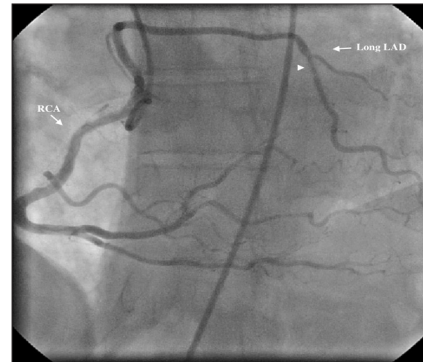


Figure 2. Left anterior oblique view of selective right coronary injection. Arrowhead shows restenosis of the stent in the long LAD artery
LAD - left anterior descending artery

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