

## Double Left Anterior Descending Coronary Artery Originating from the Left and Right Coronary Arteries: A Rare Coronary Artery Anomaly with Inferior Myocardial Infarction

Sol ve Sağ Koroner Arterlerden Köken Alan  
Çift Sol İnen Koroner Arter: İnförior Miyokard  
İnfarktüsü ile Gelen Nadir Bir Koroner Anomali

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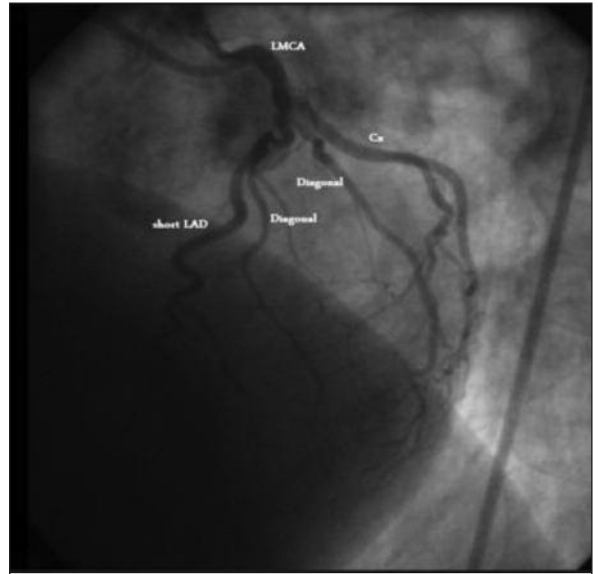
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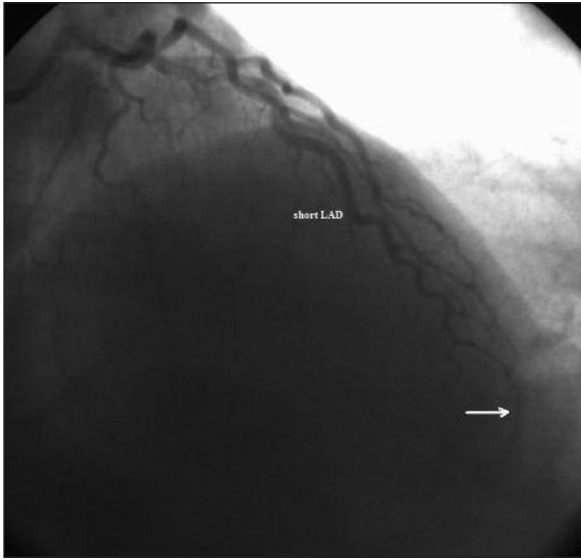
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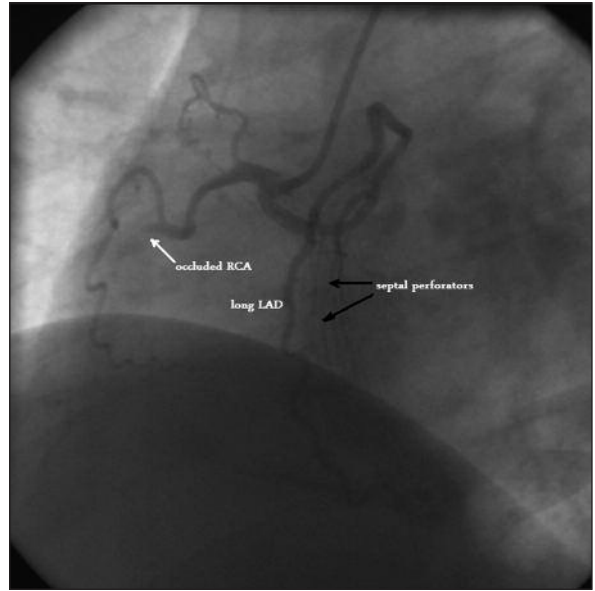
A 44-year-old male with arterial hypertension and an untreated mild hypercholesterolemia was referred to our hospital because of a 3-hour history of chest pain. The electrocardiogram showed ST-segment elevations in inferior leads. Diagnosis of acute inferior myocardial infarction was made and he was urgently transferred to the catheterization laboratory. Selective left coronary angiography revealed normal bifurcation of left main coronary artery (LMCA) and a short left anterior descending coronary artery (LAD) and circumflex artery (Cx), which were free of any significant obstruction. The short LAD courses anteriorly giving diagonal branches but not septal branches during its course to the apex (Figure 1 and 2). Selective right coronary angiography showed a right coronary artery (RCA) occluded after just giving the right



**FIGURE 1:** Left anterior oblique-cranial view of the left coronary system demonstrating the short LAD and Cx arising from the LMCA. The short LAD gives rise to the diagonal branches but not septal branches. LAD- left anterior descending artery, Cx- circumflex artery, LMCA- left main coronary artery.



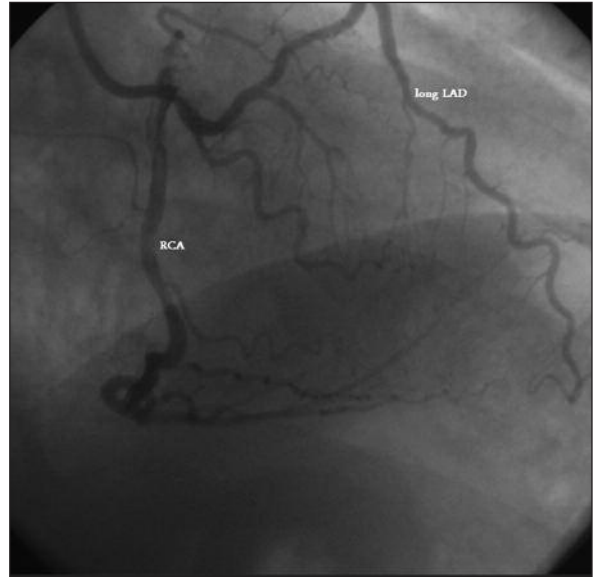
**FIGURE 2:** Right anterior oblique-cranial view of the left coronary system demonstrating the short LAD. The arrow indicates distal portion of the short LAD reaching the apex. LAD- left anterior descending artery.



**FIGURE 3:** Left anterior oblique view of the right coronary system demonstrating a totally occluded RCA (white arrow) and an aberrant long LAD arising from the proximal RCA coursing anteriorly in the anterior interventricular groove. The long LAD gives rise to all the septal branches (black arrows). RCA- right coronary artery, LAD- left anterior descending coronary artery.

ventricular branch and a long LAD arising from the proximal RCA. The long aberrant LAD coursed anteriorly similar to the original LAD and multiple septal perforators arised from this vessel during its long course to the apex (Figure 3). The lesion in the RCA was stented following predilatation, with a good result (Figure 4). Clinical course of our patient was uneventful and he was in a good health after 3 months.

In the present case, we reported a rare coronary artery anomaly in association with acute inferior myocardial infarction. To the best of our knowledge, this combination has not been previously reported.



**FIGURE 4:** Right anterior oblique view of the right coronary system after primary percutaneous coronary angioplasty demonstrating the RCA and aberrant long LAD. RCA- right coronary artery, LAD- left anterior descending artery.