

Anomalous Origin of the Left Main Coronary Artery from the Right Sinus of Valsalva: Single Coronary Artery with Acute Inferior Myocardial Infarction: Original Image

Sağ Sinus Valsalvadan Köken Alan Sol Ana Koroner Arter Anomalisi: Akut Inferior Miyokard İnfarktüsü ile Gelen Tek Koroner Arter Anomalisi

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75-year-old man with hypertension admitted to hospital because of a 6-hour history of ongoing resting chest pain. Physical examination was unremarkable. The electrocardiogram showed sinus rhythm with ST-segment elevations in leads DII-DIII-aVF. Diagnosis of acute inferior myocardial infarction was made and thrombolytic therapy with t-PA was begun. The patient's chest pain was partly resolved and early coronary angiography was performed. We were not able to cannulate the left coronary ostium in the left sinus of Valsalva. An injection into the left sinus of Valsalva in a left anterior oblique projection revealed absence of a left coronary ostium (Figure 1). The right coronary ostium has located normally in the right sinus of Valsalva. Selective catheterization of the right coronary ostium revealed a right coronary artery (RCA) and a left main coronary artery originating from the proximal right coronary artery as part of single coronary artery and takes a long course before bifurcating into a left anterior descending artery (LAD) and left cir-

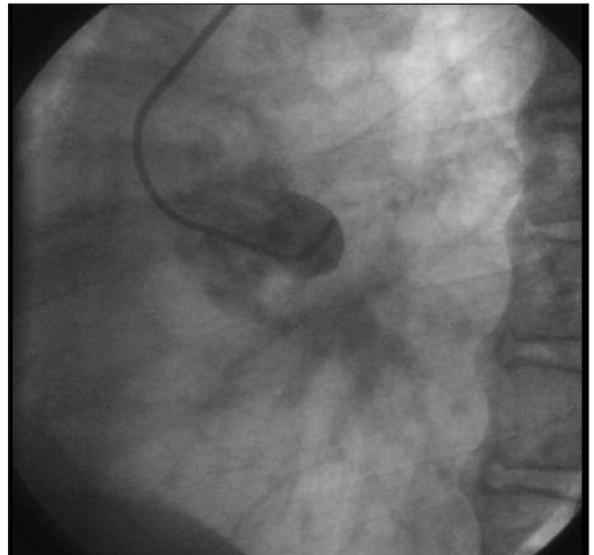


FIGURE 1: Aortography in the left anterior oblique view demonstrating absence of left coronary ostium in the left sinus of Valsalva.

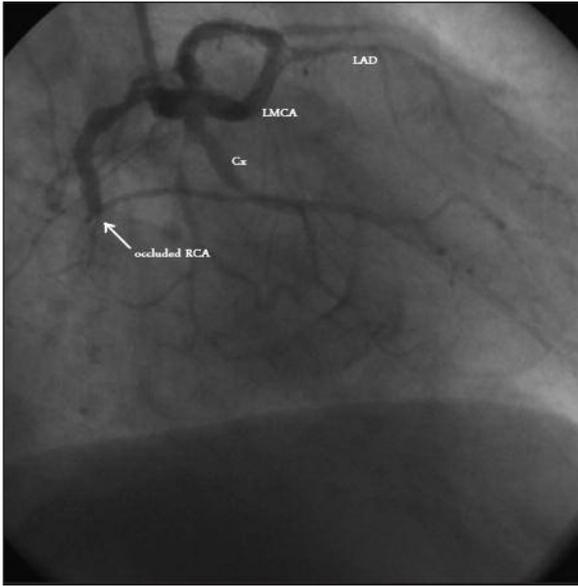


FIGURE 2: Right anterior oblique-cranial view of the right coronary system demonstrating a totally occluded RCA (arrow) and a left main coronary artery originating from the proximal right coronary artery bifurcating into an LAD and Cx. LMCA- left main coronary artery, RCA- right coronary artery, LAD- left anterior descending artery, Cx- circumflex artery.

cumflex artery (Cx) (Figure 2). There were 40% stenosis in the LAD (Figure 2) and 95% stenosis in the distal Cx (Figure 3). RCA was totally occluded in the middle portion with the posterior descending filling with left to right collaterals. Percutaneous coronary intervention was tried, but the

guide wire did not cross the RCA lesion despite many attempts and the patient was followed medically afterwards. Clinical course of our patient was uneventful and he was doing well after 3 months.

The left coronary artery arising from the right sinus of Valsalva is a rare congenital anomaly. Cardiologists should be aware of this rare coronary anomaly.

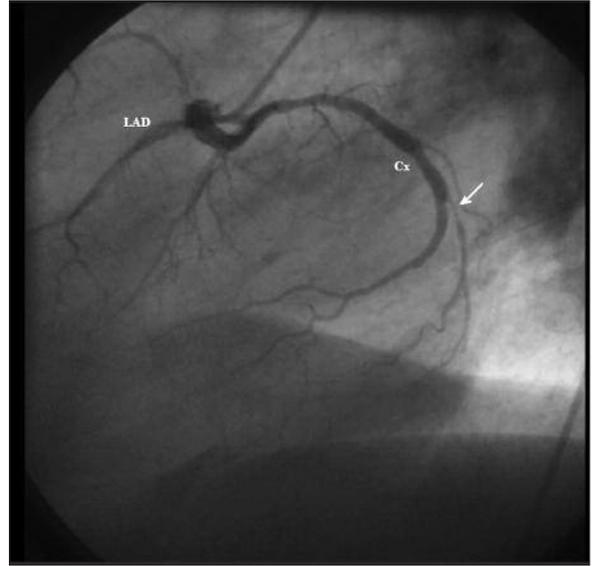


FIGURE 3: Lateral view of the left coronary system demonstrating LAD and Cx arteries. Note that there is an atherosclerotic plaque in the distal Cx (arrow). LAD- left anterior descending artery, Cx- circumflex artery.