

# **Offset of the Left Anterior Descending Coronary Artery From the Right Coronary Sinus, Occlusion of the Left Circumflex Artery and Aneurysm and Severe Stenosis of the Right Coronary Artery**

**SOL ÖN İNEN KORONER ARTERİN SAĞ KORONER SINÜSTEN ÇIKIŞI, SİRKÜMFLEKS ARTERİN OKLÜZYONU VE ANEVİRİZMATİK SAĞ KORONER ARTERDE CİDDİ DARLIK**

Mehmet ÖZAYDIN, MD,<sup>a</sup> İlker AKKUŞ, MD,<sup>b</sup> Ercan VAROL, MD,<sup>c</sup> Dr. Yasin TÜRKER, MD<sup>a</sup>

<sup>a</sup>Department of Cardiology, Süleyman Demirel University Faculty of Medicine, ISPARTA

<sup>b</sup>Clinics of Cardiology, Arkansas Methodist Hospital, Arkansas, USA

<sup>c</sup>Clinics of Cardiology, Isparta State Hospital, ISPARTA

## **Abstract**

Anomalous origin of the left coronary artery from the right coronary sinus has been previously reported. However, its association with aneurysm of right coronary artery and totally occluded left circumflex artery has never been reported. A 42 year-old male presenting with unstable angina pectoris is presented in this report. Coronary angiography showed occlusion of the left circumflex artery, offset of the left anterior descending coronary artery from the right coronary sinus, and total aneurysmatic dilation and severe stenosis of the superdominant right coronary artery. Since right coronary artery and left circumflex coronary artery supply a large area of myocardium, and the possible compression of LAD we refer the patient to coronary artery bypass surgery.

**Key Words:** Coronary vessel anomalies; coronary arteriosclerosis

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## **Özet**

Sol koroner arterin sağ koroner sinüsten köken aldığı vakalar literatürde bildirilmiştir. Bununla birlikte bu anomalinin anevrizmatik sağ koroner arter ve tam tikali sol sirkümfleks arter ile birlaklılığı hiç bildirilmemiştir. Bu yazında kararsız angina pektoris ile müraacaat eden 42 yaşındaki bir erkek oldu sunuldu. Koroner anjiyografide sol sirkümfleks koroner arter tam tikali idi, sol ön inen koroner arter sağ koroner sinüsten çıktı ordu ve anevrizmatik dominant sağ koroner arterde ciddi darlık vardı. Sağ koroner arter ve sol sirkümfleks arter geniş bir miyokard sahasını kanlandırdığı için ve sol ön inen koroner arterdeki muhtemel sıkışmadan dolayı hastaya koroner arter bypass cerrahisi operasyonu önerildi.

**Anahtar Kelimeler:** Koroner arter anomalisi; koroner ateroskleroz

**A**nomalous origin of the left coronary artery from the right coronary sinus has been previously reported.<sup>1-3</sup> However, its association with aneurysm of right coronary artery (RCA) and totally occluded left circumflex artery (LCX) has never been reported.

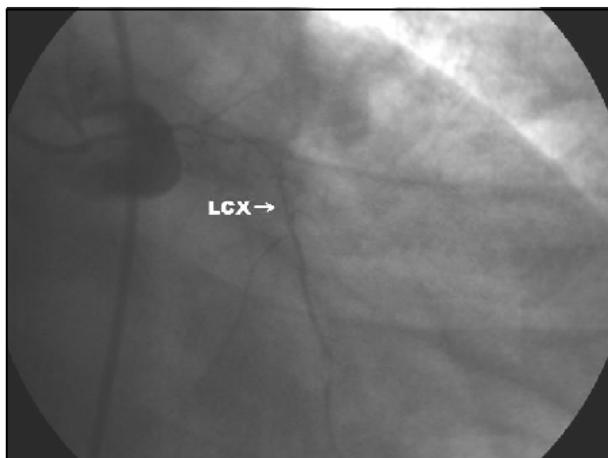
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**Yazışma Adresi/Correspondence:** Mehmet ÖZAYDIN, MD  
Süleyman Demirel University Faculty of Medicine  
Department of Cardiology, ISPARTA  
mehmetozaydin@hotmail.com

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A 42 year-old male presented with unstable angina pectoris. Coronary angiography showed occlusion of the left circumflex artery (LCX) and TIMI-1 antegrade flow (Figure 1), offset of the left anterior descending coronary artery (LAD) from the right coronary sinus (Figure 2 and 3), and total aneurysmatic dilation and 80% stenosis in the distal part, and 98% stenosis in the bifurcation of posterior descending and posterolateral branches of the superdominant right coronary artery (RCA, Figure 2 and 3). Before reaching to the anterior interventricular groove, LAD showed a posterior course to the



**Figure 1.** Total occluded circumflex artery is shown.

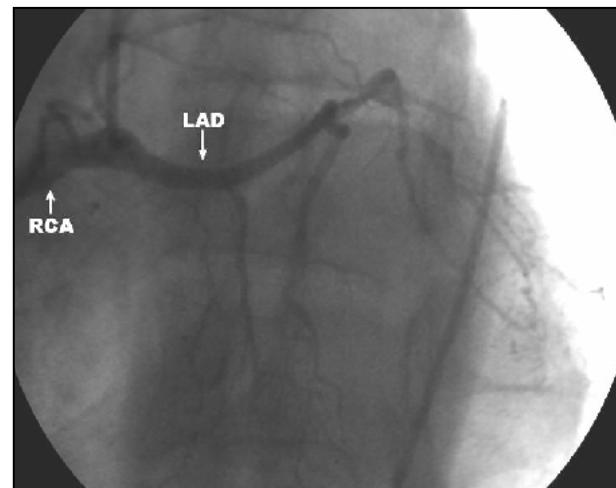


**Figure 2.** Left anterior descending coronary artery and right coronary artery is shown.

pulmonary artery. We speculated that the course of LAD between aorta and pulmonary artery may cause its compression. Since RCA and LCX supply a large area of myocardium, and the possible compression of LAD we refer the patient to coronary artery bypass surgery. Unfortunately, the patient did not want to undergo surgical procedure.

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**Figure 3.** Left anterior descending coronary artery and right coronary artery is shown.