Letter to the Editor

Single Right Coronary Artery

Spyros Tsikrikas, Dimitrios Bramos, Efthymia Rouska, Konstantinos P. Letsas, Isidoros P. Gavaliatsis, Antonios Sideris

Second Department of Cardiology, Evangelismos General Hospital of Athens, Greece

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Address: Spyros Tsikrikas

Second Department of Cardiology Division of Cardiac Electrophysiology Evangelismos General Hospital Athens, Greece
e-mail: spyrostsik@yahoo.gr

A 70-year-old man with a medical history of long-standing arterial hypertension was admitted to the emergency department complaining of chest discomfort at rest. The patient's clinical examination was normal. The ECG on admission showed left bundle branch block. Transthoracic echocardiography revealed no wall motion abnormalities of the left ventricle. Biochemical markers were negative for myocardial infarction. Chest X-ray was normal. He underwent coronary angiography, where a single right coronary artery was revealed (Figure 1). The aortogram and left ventriculogram showed no vessel arising from the left coronary sinus.

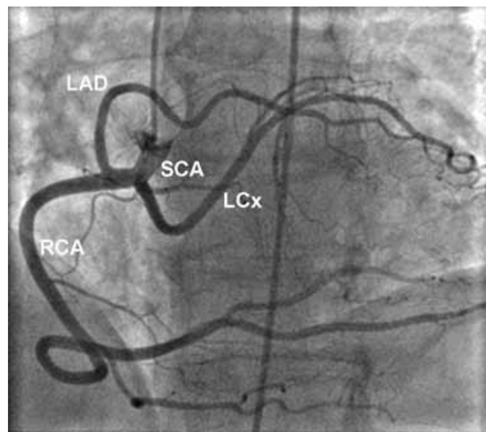

Figure 1. Cannulation of the right coronary artery (RCA) revealed a single coronary artery originating from the right sinus of Valsalva at the normal position of the ostium of the RCA. The left circumflex (LCx) and the left anterior descending (LAD) coronary arteries originate from the proximal right coronary artery as separate arteries.

Congenital coronary artery anomalies are rare, with an incidence ranging from 0.17% in autopsy studies to 1.3% in angiographic series. A single coronary artery is a particularly rare entity, occurring in approximately 0.03-0.4% of the population (49% arose from the right sinus of Valsalva).[1,2] The prevalence of a single coronary artery is reported to be less than 3% of all major coronary artery anomalies.[2,4] The single coronary artery has been associated with chest pain, acute myocardial infarction, syncope, and sudden cardiac death.[3,5]

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