

Image in cardiology

## Primary Angioplasty in a Single Coronary Artery



### Angioplastia primaria sobre arteria coronaria única

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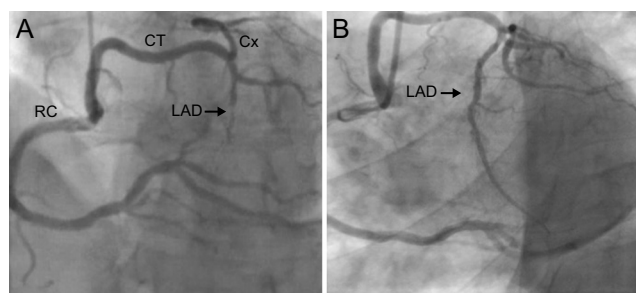


Figure 1.

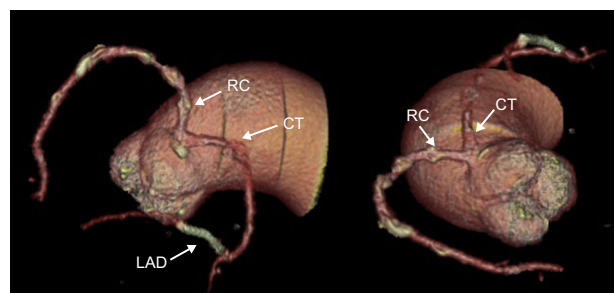


Figure 2.

A 79-year-old man with hypertension and type 2 diabetes was hospitalized for ST-segment-elevation acute myocardial infarction in an anterior location. Coronary angiography showed a single coronary artery (SCA) originating from the right coronary sinus (RCS). The coronary artery trunk (CT) immediately arose from this single vessel, had a long trajectory, and branched into a rudimentary circumflex artery (Cx) and the left anterior descending artery (LAD), which showed a thrombotic occlusion in its middle portion (Figure 1A, Video 1 of the Supplementary Material). The CT was cannulated using a Judkins right 4 guide catheter, and a drug-eluting stent was implanted in the middle LAD, with a good angiographic outcome (Figure 1B, Video 2 of the Supplementary Material).

Computed tomography coronary angiography confirmed the SCA originating from the RCS, and showed a disease-free common ostium, absence of the left coronary ostium, and an anterior course of the CT above the pulmonary artery (Figure 2), which categorized the anomaly as SCA R-IIA according to Lipton's classification.

An SCA is an uncommon finding, occurring in 0.024% to 0.066% of the population, and those originating from the RCS are extremely unusual. Because the common ostium was disease-free, the vessels did not run in an interarterial fashion, and the patient was of advanced age, we considered the SCA to be a low-risk variant and selected conservative treatment. This report illustrates an unusual diagnosis of SCA by primary coronary angiography, as well as the importance of the correct choice of guide catheter for selective cannulation of the anomalous artery.

#### SUPPLEMENTARY MATERIAL



Supplementary material associated with this article can be found in the online version available at: <http://dx.doi.org/10.1016/j.rec.2016.10.007>.

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