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The single coronary artery

La arteria coronaria única

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A 38-year-old active smoker presented with persistent and progressive angina pectoris showing exacerbation with exercise. Computed tomography angiography (CTA) revealed the presence of a rare form variant, in which the right coronary artery originates from the left cusp with a common ostium with the left anterior descending artery and with an intra-arterial, so called "malignant," course between the ascending aorta and truncus pulmonalis (Fig. 1). The patient was referred to the cardiovascular surgery department for the evaluation of a possible corrective surgery.

The common origin of the coronary arteries by a single trunk from the left coronary sinus is extremely rare[1]. In this specific incidence, it is associated with the malignant course of the right coronary artery lying between the ascending aorta and truncus pulmonalis, a condition known to increase the risk of sudden cardiac death. CTA is a reliable imaging modality for showing the course of the coronary arteries and their myocardial relationship[2]. The need for surgery is controversial and is rather considered in case of an intra-articular malignant course.

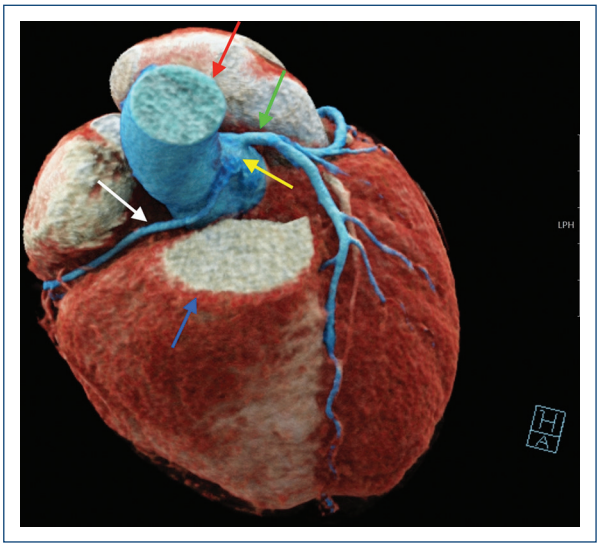

Figure 1. Volume rendered image of the heart demonstrating the presence of a rare form variant, in which the right coronary artery (white arrow) originates from the left cusp (yellow arrow) with a common ostium with the left anterior descending artery (green arrow) and with an intra-arterial, so called "malignant," course between the ascending aorta (red arrow) and truncus pulmonalis (blue arrow).

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Conflicts of interest

None.

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Right to privacy and informed consent. The authors have obtained the written informed consent of the patients or subjects mentioned in the article. The corresponding author is in possession of this document.

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