




## Something is missing? – a case report

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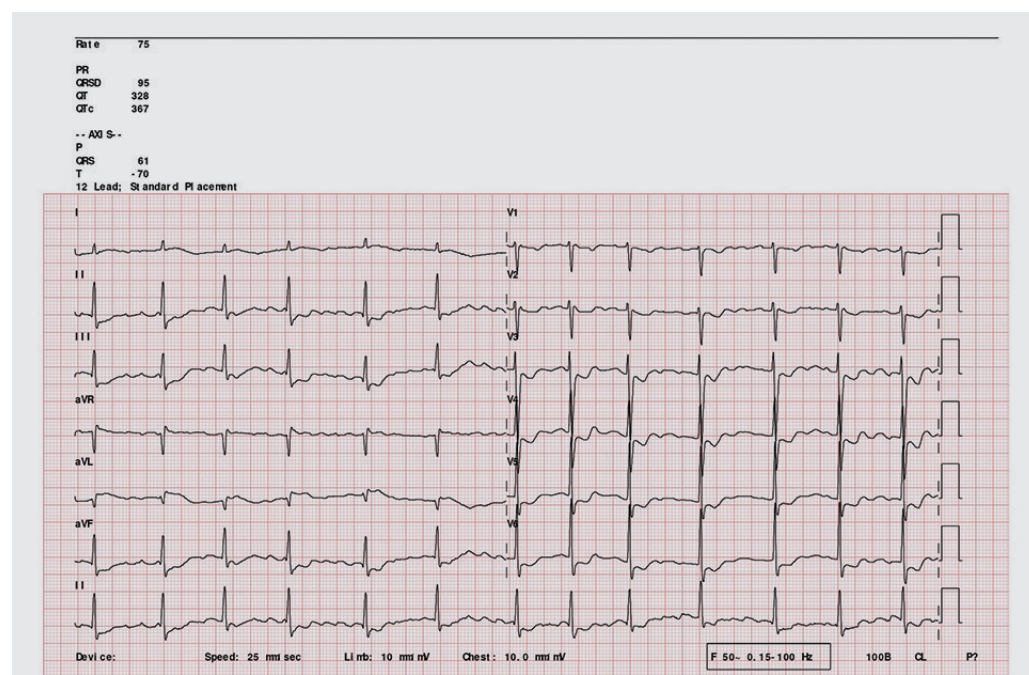
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**Introduction:** Coronary artery anomalies (CAA) are congenital conditions that include an unusual origin, flow, or termination of the coronary artery<sup>1</sup>. They are usually incidental findings on cardiac imaging or autopsy. According to earlier research, CAA appears in less than 1% of the general population<sup>2</sup> but is, therefore, present in about 17% of sudden cardiac deaths (SCD) in younger athletes<sup>3</sup>.

**Case report:** 71-year-old patient came to the Emergency Department of University Hospital Centre Rijeka due to chest pain that had been present for the past three hours. The pain was spreading to the left arm, accompanied by nausea and sweating. Arterial hypertension, chronic obstructive pulmonary disease, and smoking were present in the earlier medical history. The 12-lead electrocardiogram (ECG) was performed immediately, and posterior and lateral ST-segment elevation with atrial fibrillation of unknown duration was detected (**Figure 1**). Point of care echocardiography showed hypokinesia of the base and inferolateral wall. An emergency coronary angiography was performed, which initially showed atherosclerotic changes in the left anterior descending (LAD) and right coronary artery (RCA). Non-selective angiographic contrast injection near RCA origin revealed a trace that suggested the existence of an anomalous left circumflex artery (LCx) and acute occlusion of its origin. The culprit lesion was crossed with a guide wire, and pre-dilatation was performed with a Traveler balloon catheter (2.5 x 20 mm). Furthermore, two drug-eluting stents (2.5 x 19 mm and 2.5 x 13 mm) were implanted. The optimal effect was achieved with TIMI 3 flow (**Figure 2**). In the further course, the patient was without

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**FIGURE 1.** Posterior and lateral ST-segment elevation with atrial fibrillation.

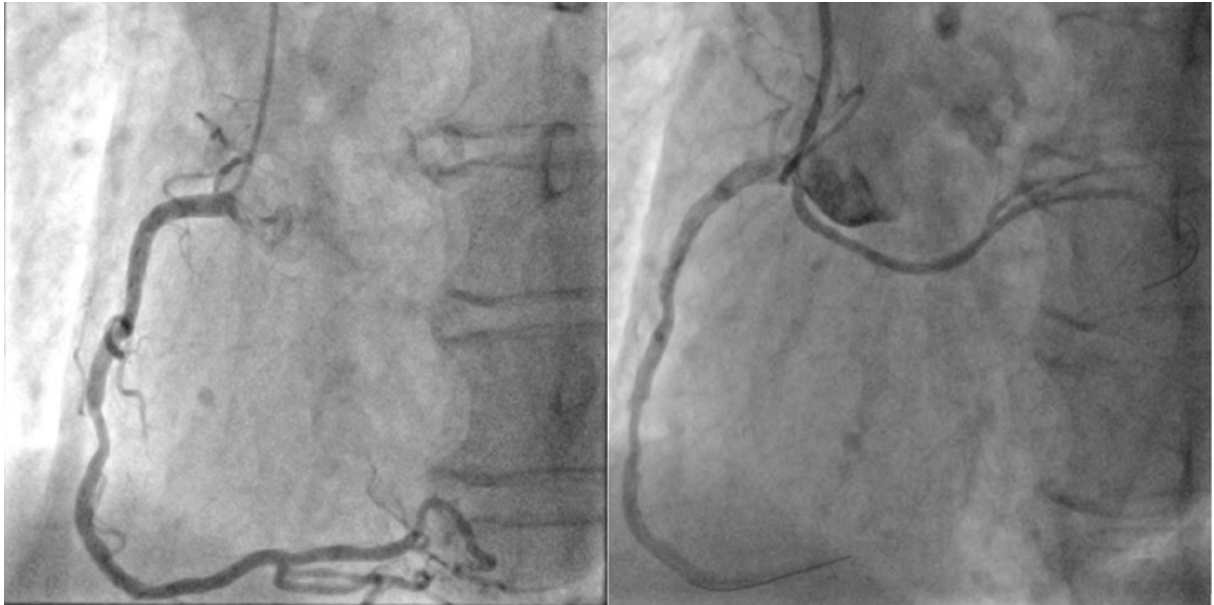


FIGURE 2. Before and after successful percutaneous coronary intervention in the anomalous circumflex artery.

complaints, triple therapy was initiated due to atrial fibrillation, and ultrasound described a mildly reduced ejection fraction of the left ventricle, with hypokinesia as stated earlier and no significant valvular pathology. The follow-up examination was in six months and one year; recovery went well, and the patient had no complaints.

**Conclusion:** In acute coronary syndrome, early detection and localization of CAA are crucial for successful treatment. Present coronary arteries and ECG findings can indicate which irrigation area is in ischemia. Also, non-selective contrast injection can be beneficial in distinguishing what is missing.

#### LITERATURE

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