

An anomalous left coronary artery with a malignant course: coronary angiography and myocardial perfusion imaging with computed tomography

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A 41-year old woman presented at the emergency department because of collapse during running. Coronary computed tomography angiography (CTA) showed no atherosclerosis (Fig. 1). However, as demonstrated by the double oblique view of the sinus of Valsalva in Panel A and 3D-rendering of Panel B, the left coronary artery (LCA) originated from the right coronary sinus. The LCA has an acute angle and a ‘slit-like’ ostium which can collapse in a valve-like manner during exercise. The incidence of this finding on CTA ranges from 0.7–6.6% [1, 2]. Adenosine stress CT myocardial perfusion imaging (CTP) was performed. Panel C demonstrates a sub-endocardial perfusion defect in the LCA region (white arrows). Panel D represents the polar map of the transmural perfusion ratio. Surgical unroofing was performed successfully and no further events have occurred [3]. In patients

presenting with collapse a malignant coronary anomaly can be observed. CTP can subsequently be performed to detect myocardial ischaemia.

Disclosures

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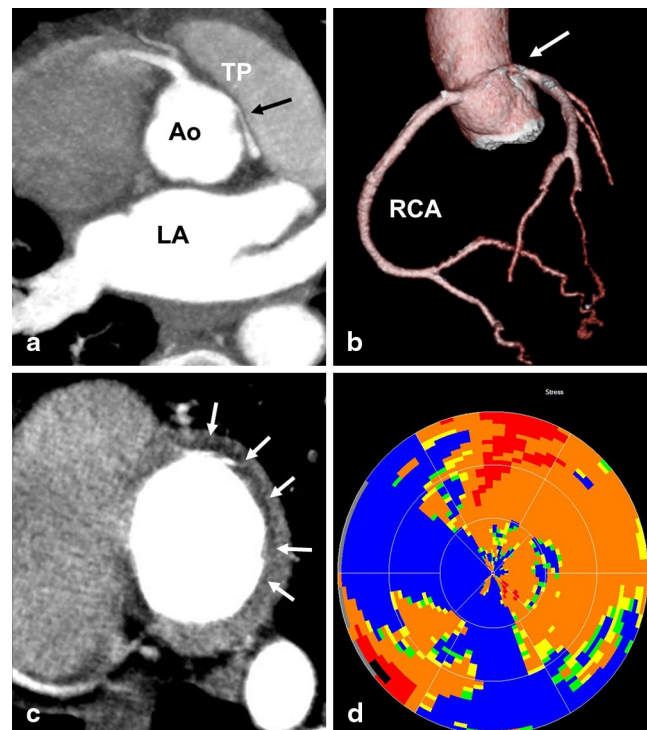


Fig. 1 Computed tomography coronary angiography and myocardial perfusion imaging

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