ESC European Society of Cardiology

European Heart Journal - Case Reports (2019) **3**, 1–2
doi:10.1093/ehjcr/ytz088



# Giant coronary artery aneurysm in a patient with LEOPARD syndrome

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*Received 3 February 2019; first decision 27 February 2019; accepted 3 June 2019; online publish-ahead-of-print 1 August 2019*

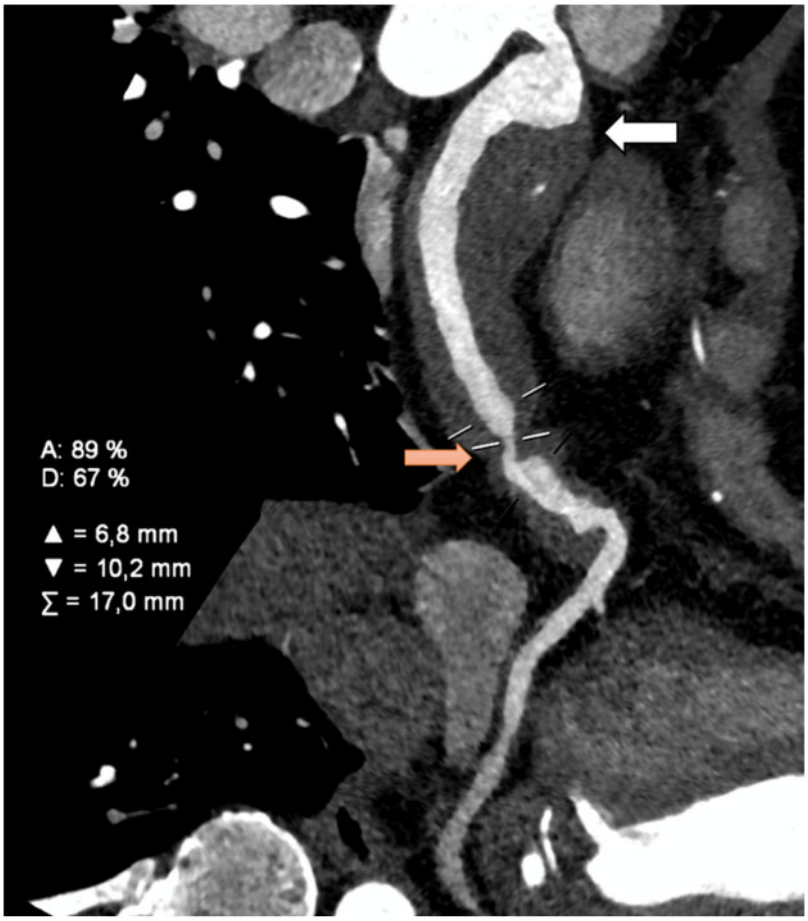


**Figure 1** TDM reconstruction showing the RCA in its entire length, with large dilatation on the proximal part (26 mm max at the lower flexure) partially thrombosed with severe distal stenosis (67% in diameter and 89% in surface).

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Handling Editor: Riccardo Liga

Peer-reviewers: Richard Alexander Brown and Panagiotis Xaplanteris

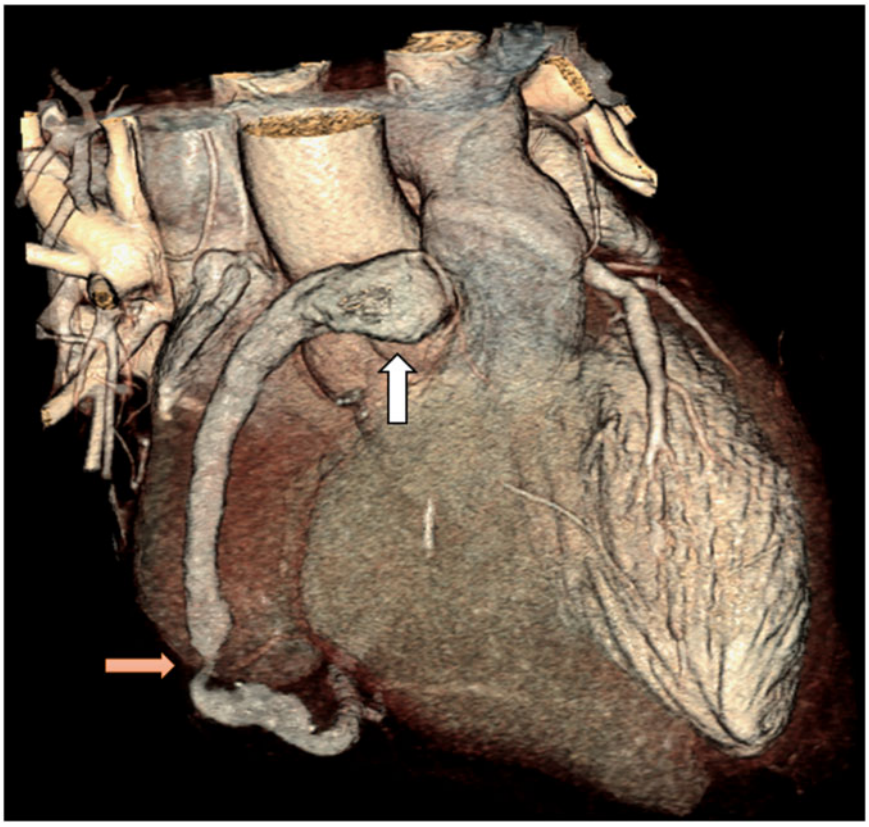

**Figure 2** Volume rendered CT image showing the same structures than *Figure 1* with dilatation of the proximal part (white arrow) and severe distal stenosis (red arrow).

A 39-year-old woman, with LEOPARD syndrome (LS; PTPN 11 mutation) and known non-obstructive hypertrophic cardiomyopathy came to our attention for follow-up evaluation. She reported chest pain at exercise and palpitation.

A cardiac MRI showed asymmetrical septal hypertrophy (17 mm) with areas of non-ischaemic myocardial fibrosis and no signs of pulmonary stenosis. A giant aneurysm of the first and second segment of the right coronary artery (RCA) was also revealed.

A cardiac CT was subsequently performed, confirming partially thrombosed giant RCA aneurisms (27 mm) associated with severe distal stenosis (67% in diameter and 89% in surface) (*Figures 1* and *2*). CT also demonstrated a fusiform dilatation of left anterior descending coronary artery measured at 9 mm.

Due to the high thrombotic burden, oral anticoagulation with Warfarin was preferred over antiplatelet therapy.

A stress test was performed on a cycle ergometer under beta-blockers, and showed no signs of myocardial ischaemia. Nevertheless, the patient soon developed unstable anginal symptoms that urged surgical correction of the coronary anomaly, with exclusion of the aneurysm followed by RCA bypass graft.

Vascular aneurysm[1] including coronary arteries[2] and peripheral vessels have been associated with LS.[3] To our best knowledge, this is the first description of giant and partially thrombosed aneurysm of coronary arteries associated with LS. The clinical impact of those abnormalities is unknown but we should consider a careful examination of coronary arteries in patients with LS.

## Supplementary material

Supplementary material is available at *European Heart Journal - Case Reports* online.

**Consent:** The author/s confirm that written consent for submission and publication of this case report including image(s) and associated text has been obtained from the patient in line with COPE guidance.

**Conflict of interest:** none declared.

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