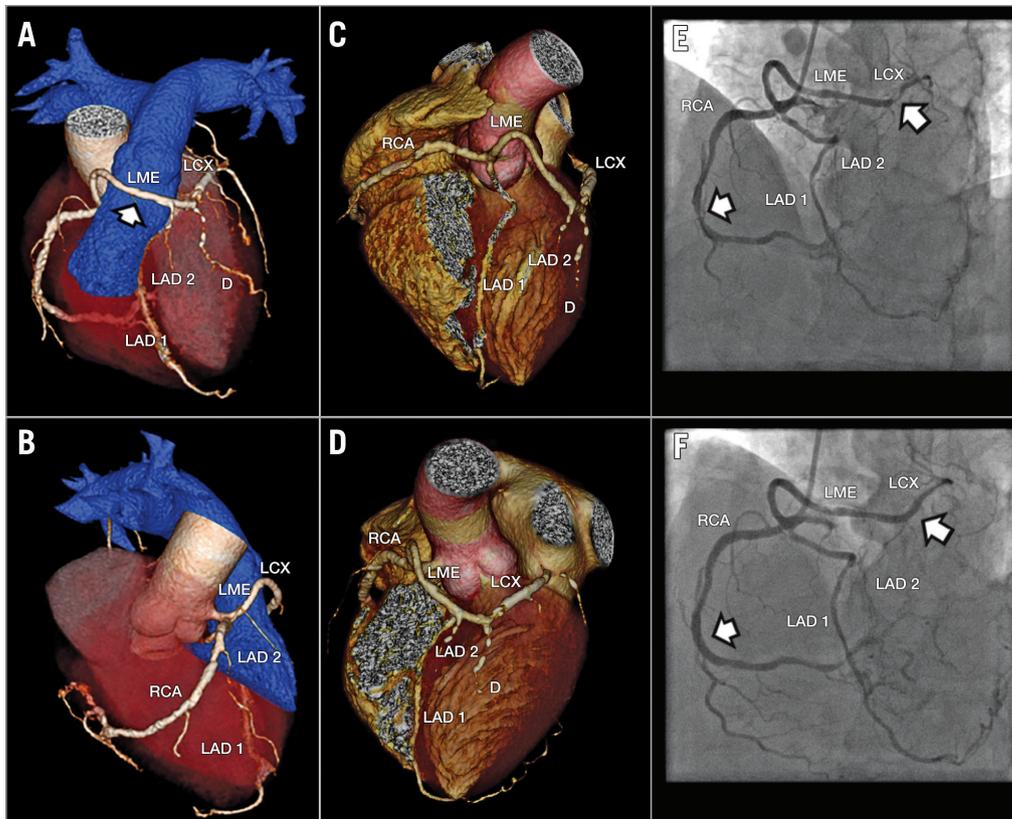


Single coronary artery arising from the right aortic sinus with dual LAD supply from separate branches



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A 55-year-old male presented with angina and reversible ischaemia on stress imaging. He had a rare combination of an anomalous single coronary artery, dual left anterior descending artery (LAD) supply from 1) a transseptal, long middle/distal LAD, and 2) a separate, pre-pulmonic, short left main equivalent supplying the proximal LAD, septal, diagonal, and left circumflex (LCX) territories. CT reconstruction (**Panels A-D**) demonstrated a single coronary artery from the right aortic sinus which trifurcated into the right coronary system and two additional branches supplying the left coronary system. One branch travelled along the right ventricular (RV) aspect of the septum as a long middle and distal LAD equivalent and supplied branches along the inferolateral and lateral left ventricle. A second branch served as a left main equivalent with a pre-pulmonic course

anterior to the RV outflow tract, prior to giving rise to a small proximal LAD and associated septal and diagonal branches, and LCX (**Panel A**: LAO cranial view; **Panel B**: LAO caudal view; **Panel C**: RAO cranial view; **Panel D**: LAO cranial view. RCA: right coronary artery; LME: left main equivalent; LCX: left circumflex artery. LAD 1: LAD coursing intraseptally; LAD 2: arising from LME; D: diagonals. White arrow: LME coursing anterior to the pulmonary trunk). The patient underwent successful PCI of the mid-RCA and proximal LAD (**Panels E & F**: LAO cranial view; arrowheads pointing to stenotic lesions pre- and post-stent).

Conflict of interest statement

The authors have no conflicts of interest to declare.

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