

Figure 2 Spider view three-dimensional volume-rendered CT images indicate an anomalous origin of the left circumflex coronary artery (CX) arising from the right coronary artery (RCA) and coursing between the aorta (AO) and the left atrium (LA). LDA, left anterior descending coronary artery; RCA, right coronary artery.

of angina was likely due to the neuropathy caused by diabetes.⁴ The risk of sudden death (SD) has been reported in patients with AOLCX.⁵ However, an ectopic left coronary artery is more likely to cause SD due to the greater ischaemic territory involved.⁶ Moreover, this risk decreases with age. In this patient, the combination of fibrosis, ischaemia and normal tissue may imply electrical instability and life-threatening arrhythmias due to enhanced automaticity, triggered activity or re-entry.⁷ As the ischaemia was mild, surgery was not indicated and the β -blocker dose was increased to provide greater myocardial protection.

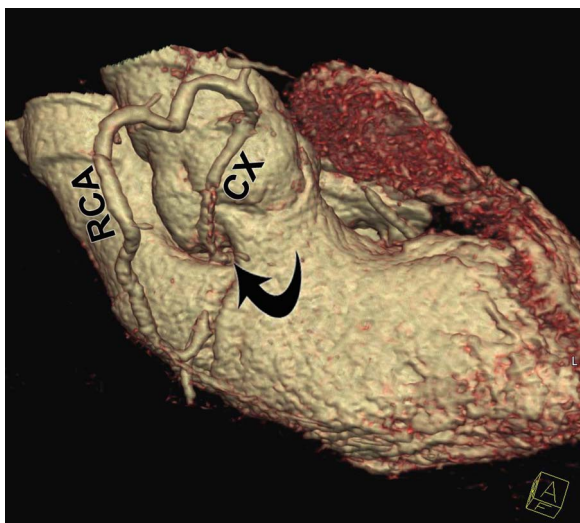


Figure 3 Right oblique three-dimensional volume-rendered CT image demonstrates the anomalous origin of the left circumflex artery (CX) from the right coronary artery (RCA) and its course in the groove between left ventricular outflow tract and anterior wall of the left atrium (arrow).

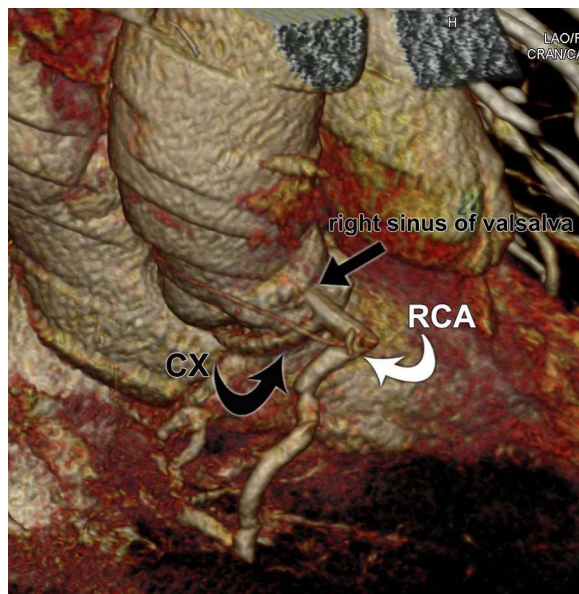


Figure 4 Right oblique superior three-dimensional volume-rendered CT image demonstrates the anomalous origin of the left circumflex coronary artery (curved black arrow) from the right coronary artery (curved white arrow). There is 3 mm long common trunk arising from the right sinus of Valsalva (small arrow) that bifurcates into the left circumflex and right coronary arteries. CX, coronary artery; RCA, right coronary artery.

Learning points

- ▶ A negative submaximal exercise test is a frequent finding in patients with congenital coronary anomalies.
- ▶ In the temporal sequence of the pathophysiological cardiac changes that culminate in ischaemia, abnormal myocardial perfusion on single-photon emission cardiac tomography (SPECT) imaging precedes ST-segment depressions on an exercise test. Compared to an exercise test, SPECT imaging has greater diagnostic capacity for identifying myocardial ischaemia.
- ▶ Cardiac CT has been established as an excellent non-invasive test to identify and classify congenital coronary artery anomalies.

Contributors GPC was involved in writing the manuscript. PS performed the CT imaging and was involved in revision of the manuscript. Both the authors approved the final version of manuscript to be published.

Competing interests None.

Patient consent Obtained.

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