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CARDIOVASCULAR FLASHLIGHT

doi:10.1093/eurheartj/ehaa514
Online publish-ahead-of-print 3 August 2020

Anomalous origin of the left coronary artery from the pulmonary artery in a 72-year-old patient

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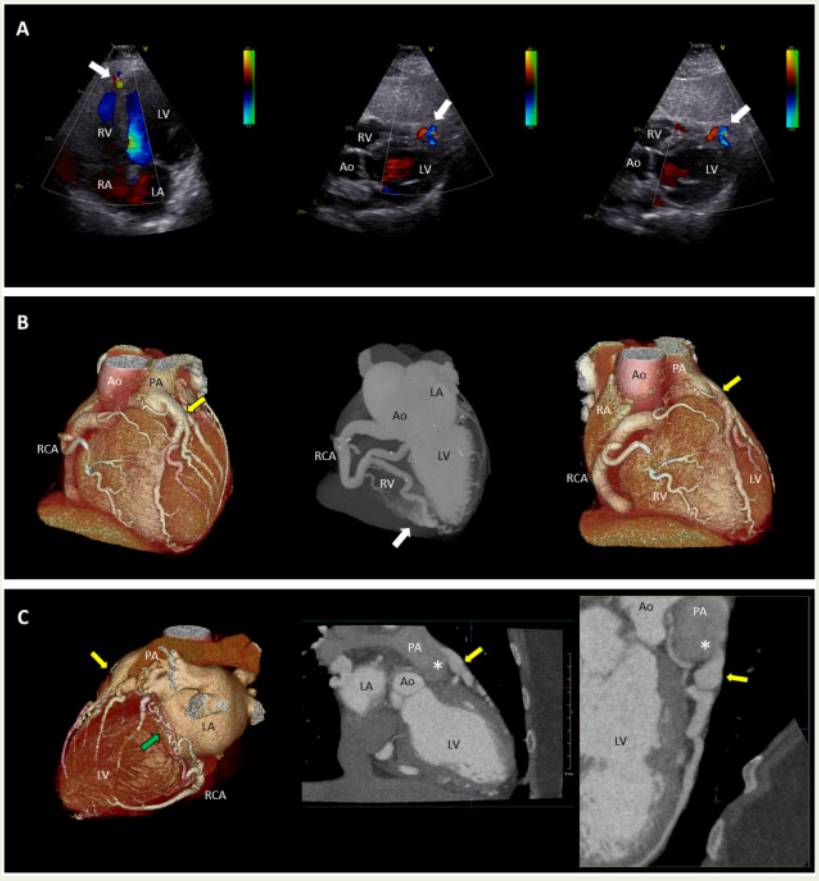

A 72-year-old female with atypical chest pain was referred to our centre for evaluation. She has no cardiac history or any cardiac risk factors besides prior to smoking. Transthoracic echocardiography showed concentric hypertrophy of the left ventricle (LV) with mildly reduced LV ejection fraction (47%). Colour Doppler imaging demonstrated anomalous flow at the right ventricular (RV) apex (white arrow, *Panel A*, Supplementary material online, *Video*).

Coronary computed tomography angiography was performed for further evaluation. An anomalous coronary anatomy was demonstrated with the left coronary artery (LCA) originating from the pulmonary artery (PA) (yellow arrow, *Panels B* and *C*). Numerous collateral vessels (green arrow, *Panel C*) arose from an extremely ectatic right coronary artery (RCA) emptying into the LCA resulting in a left-to-right shunt at the PA (asterisk, *Panel C*). Moreover, the abnormal echocardiographic findings were clarified as contrast media emerged at the apex of the RV indicating the presence of fistulae between RCA–LCA and RV (white arrow, *Panel B*). Anomalous origin of the left main coronary artery from the pulmonary artery or adult Bland–White–Garland syndrome is a rare congenital condition. It is the most common cause of myocardial dysfunction in infancy and during adulthood may result in heart failure, mitral regurgitation, and ventricular arrhythmia. Nevertheless, in this case, a unique collateral circulation allowed long-term survival without remarkable cardiac symptoms or complications. Coronary computed tomography angiography permits accurate and non-invasive depiction of coronary artery anomalies.

Ao, aorta; LA, left atrium; LV, left ventricle; PA, pulmonary artery; RA, right atrium; RCA, right coronary artery; RV, right ventricle.

Supplementary material is available at *European Heart Journal* online.