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IMAGE IN CARDIOLOGY

Anomalous left coronary artery from the pulmonary artery syndrome: When everything falls into place

Síndrome de ALCAPA: um caso de sucesso

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A 10-year-old girl, who has no relevant medical history, experienced, while running, cardiac arrest with shockable rhythm (ventricular fibrillation), recovering spontaneous circulation after one use of electrical defibrillation. The admission transthoracic echocardiogram reported normal biventricular function and unidentifiable left coronary artery ostium. The computed tomography angiography and coronary angiogram revealed a huge right coronary artery, an anomalous origin of left coronary artery (LCA) from the main pulmonary artery (Figure 1A–C) and confirmed the rare diagnosis of anomalous LCA from the pulmonary artery (ALCAPA) syndrome. The patient underwent successful heart surgery with direct reimplantation of the proximal LCA in the aortic root. Two years later, she remained asymptomatic with normal biventricular function on serial transthoracic echocardiograms. The patient performed a treadmill stress test (Bruce protocol) which revealed normal functional capacity (11 metabolic equivalent) and was clinically negative but electrically positive for myocardial ischemia. She underwent a coronary angiogram which showed no pathological narrowing of the reimplanted LCA. Additionally, it was noted that both coronary arteries presented normal dimensions (Figure 1D).

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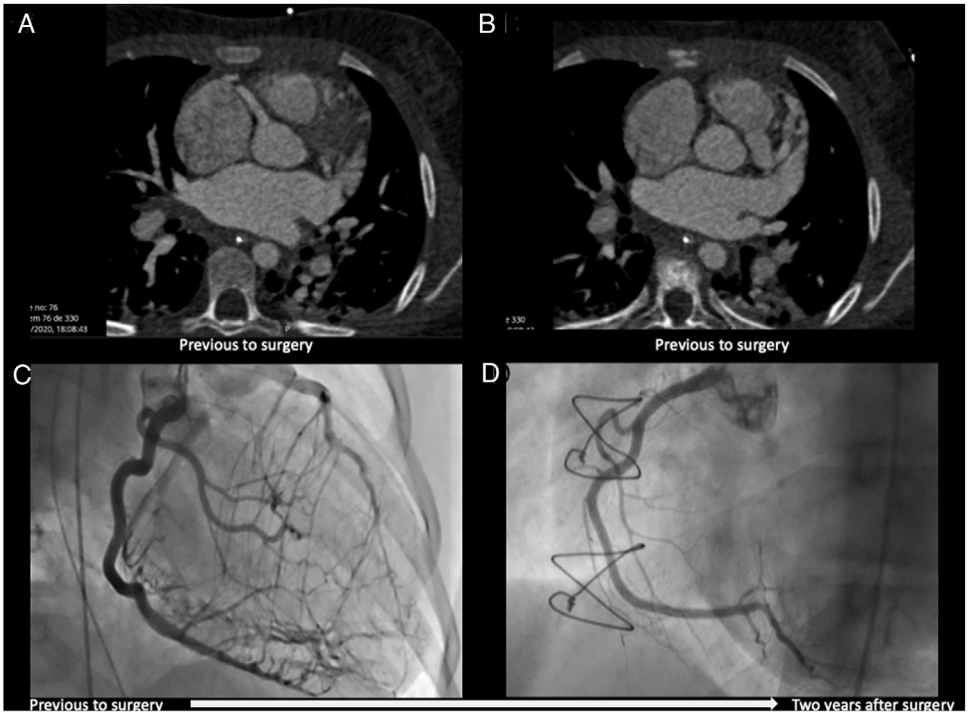

Figure 1

In summary, the authors present a rare case of ALCAPA syndrome with uncommon and late presentation, successfully treated with cardiac surgery and with an impressive reshaping of coronary dimensions during follow-up.

Conflicts of interest

The authors have no conflicts of interest to declare.