Terminal right coronary artery fistula to right ventricle

*Fístula terminal da artéria coronária direita para o ventrículo direito*

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A 57 year-old man, obese, with history of hypertension, dyslipidemia, smoking and two previous ischemic strokes, was admitted with a six month history of chest pain associated with dyspnea on moderate and large efforts. He was hemodynamically stable and making use of captopril, aspirin, hydrochlorothiazide and metoprolol. There was no mention of chest murmur in the hospital admission record. A routine Doppler echocardiogram showed normal results and no mention of coronary fistula. Coronary angiography revealed lesions in the left main coronary artery (60-70%); left anterior descendent artery (LAD) (80%), and proximal lesions in the right coronary artery (RCA) (50%). In addition it casually revealed the presence of a terminal coronary-cavitary fistula arising from the RCA and shunting blood to the right ventricle. The surgical findings revealed diffuse calcifications of proximal coronary arteries. Interestingly, the RCA had normal appearance near the fistula. Surgery consisted of dissection and exposure of the fistula before cardiopulmonary bypass (CPB) (Figure B), followed by ligation on CPB (Figures C and D), and CABG (LITA anastomosis in situ for LAD and left coronary circumflex artery radial artery graft).

It is difficult to discuss coronary fistula hemodynamic and clinical repercussions due to the patient comorbidities, particularly the severity of coronary artery disease. From the surgical findings, it is highly probable that the fistula is a congenital type B malformation in the Sakakibara classification [1].

REFERENCE


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