Image in cardiology

Large Congenital Coronary Fistula

Fístula coronaria congénita gigante

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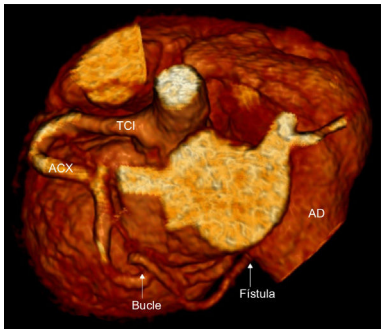

Figure 1.

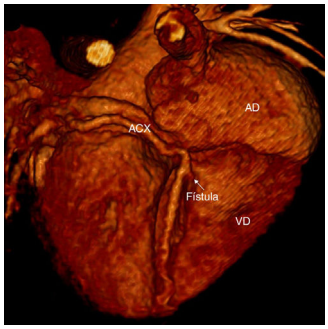

Figure 2.

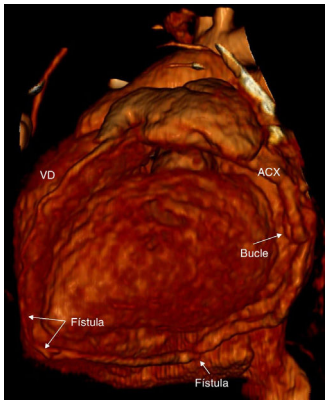

Figure 3.

A newborn infant, born following an unmonitored pregnancy to a cocaine-using mother, was referred to our cardiology service due to an episode of peri-oral cyanosis with apnea lasting a few seconds and spontaneous recovery. Heart and lung auscultation was unremarkable and there was no hepatomegaly. An echocardiogram showed elevated pulmonary pressures attributable to transitional neonatal circulation, permeable foramen ovale and systolic-diastolic flow that crossed the left atrioventricular groove and appeared to terminate in the right ventricle (RV). Coronary arteries had a normal pattern, with a normal right coronary artery in the initial portion and mild dilatation of the left coronary artery (LCA). There was no chamber dilatation or segmental defects of contractility. The electrocardiogram showed no evidence of coronary ischemia or significant abnormalities for the patient's age. Troponin and creatine kinase values were within the normal range, and other parameters were unremarkable.

After establishing a diagnosis of suspected coronary fistula, we performed a coronary computed tomography (Figures 1-3) when the patient was aged 23 days. The image was compatible with an arterial fistula to the RV passing through the posterior basal wall of the RV before the origin of the posterior descending coronary artery. The fistula appeared to communicate with the lateral wall of the right atrium (RA), coinciding with an arterial loop in the circumflex artery (CxA).

At age 2.5 years, the patient remains cardiologically asymptomatic. He has been treated conservatively and has been monitored through regular outpatient appointments. His weight gain is appropriate and he shows no signs of heart failure.

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Available online 10 October 2017

http://dx.doi.org/10.1016/j.rec.2017.09.007