Coronary artery fistula documented by invasive and non-invasive image techniques

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A 32-year-old man diagnosed for a cardiac murmur in his early childhood. He has been asymptomatic from cardiac point of view until 2 years ago when he starts suffering atypical chest pain occasionally. The exercise treadmill test is negative, and the echocardiogram shows a continuous flow to the right ventricle outflow tract. Then a cardio-magnetic resonance is performed. It identified a large coronary artery fistula (≈10 mm) from the main left coronary artery towards the right ventricle outflow tract (breath hold BTFE). The invasive study by selective coronaryography confirms the large fistula, although with a narrowing at its distal anastomosis (below valvular plane, with a little diaphragm). There is flow towards the right ventricle outflow tract and so to pulmonary trunk. The QP/QS, calculated by oximetric sampling in the cardiac catheterism, is estimated as 1.3/1 and there are no features of haemodynamic compromise. Finally, a coronary-CT scan (Philips 64 D) is carried out (helicoidal technique). It also points at the coronary fistula with dimensions: 9 mm long, maximum diameter of 11 mm, medium diameter of 9 mm, and distal anastomosis of 2.3 mm.

There is no coronary anomaly in other cardiac structures, and the right and left ventricular functions are preserved.

Although the fistula is big, the distal anastomosis is small. Due to the fact of absence of angina, normal treadmill test, and overall lack of haemodynamic repercussion (little QP/QS), it is decided clinical follow-up of the patient.