Right Coronary (RC) Artery Fistula to the Pulmonary Trunk (PT) with Associated Anomalies

Valéria de Melo Moreira e Edmar Atik
Instituto do Coração do Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo, São Paulo, SP, Brazil.

Adolescent, 13 yrs, with slight fatigue and cyanosis since birth. No heart failure, oxygen saturation > 80% and continuous murmur +/++ at the inferior left sternal border. Chest x-ray showed higher caliber vessels to the left. Left pulmonary artery hypertension (90/45-60 mm Hg and 7.8 UW) and normotension to the right (20 mm Hg, 1.8 UW). Left pulmonary artery originated from the ascending aorta and the right pulmonary artery filled through a fistula of the right coronary artery to the pulmonary trunk. Different levels of pulmonary artery pressure caused procedure difficulty through the unification of the two systems. The stable clinical picture led to the expectant conduct.

Figure 1 - Three-dimensional reconstruction of the chest angiotomography demonstrating the aortic origin of the left pulmonary artery (A- Anterior view) and pulmonary valvular atresia (thick arrow) (with the pulmonary trunk supplied by right coronary artery fistula with saccular dilatation and distal stenosis (B- Lateral view); Two-dimensional axial views show the pulmonary artery originating from the ascending aorta (C) and the fistula between the right coronary and the pulmonary trunk in continuity with the right pulmonary artery (D); Ao - aorta; RPA - right pulmonary artery; LPA - left pulmonary artery; RC - right coronary; PT - pulmonary trunk.

Key Words
arterio-arterial fistula; pulmonary artery; congenital abnormalities.