Image in cardiology

Anomalous Origin of the Left Subclavian Artery

Origen anómalo de la arteria subclavia izquierda

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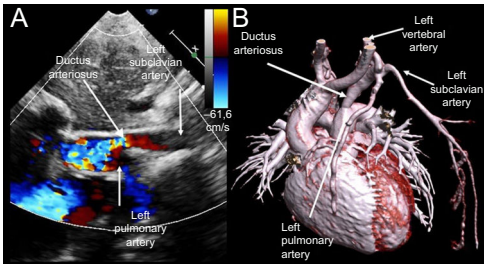

Figure 1.

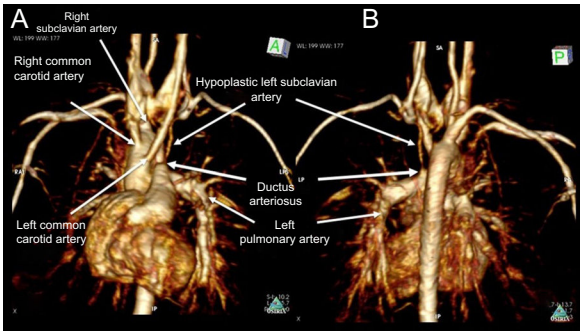

Figure 2.

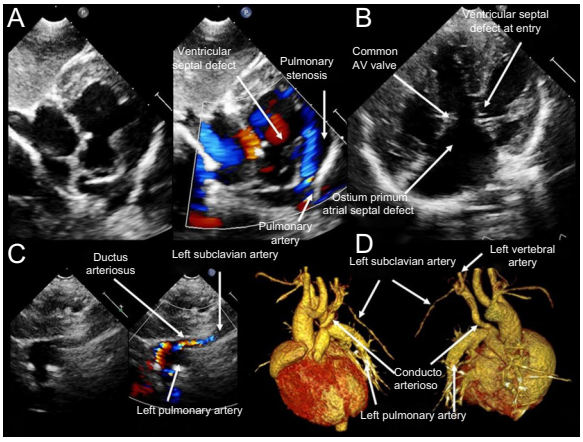

Figure 3.

We present the cases of 3 patients with chromosome 22q11 deletion and a rare malformation of the aortic arch system characterized by right aortic arch with an aberrant left subclavian artery originating in the homolateral pulmonary artery and passing through a ductus arteriosus. In all cases, these abnormalities were associated with congenital heart disease. Lower arterial pressure and weaker pulse in the left arm compared with the right were considered grounds for suspicion of this malformation.

The first case was a 7-month old boy with an echocardiographic diagnosis of ventricular septal defect, right aortic arch, and anomalous origin of the left subclavian artery in the left branch of the pulmonary artery and passing through a ductus arteriosus (Figure 1A). Computed tomography angiography confirmed the finding and showed that the left subclavian artery was irrigated through the left vertebral artery (Figure 1B). The second case was a 23-year-old woman diagnosed with tetralogy of Fallot. Magnetic resonance imaging showed a hypoplastic left subclavian artery originating in the homolateral pulmonary artery and an apparent flow inversion in the left vertebral artery, a finding consistent with drainage from the subclavian artery (Figure 2A and 2B). The third case was a girl aged 2 years and 8 months who was diagnosed by echocardiography (Figure 3A), and computed tomography angiography (Figure 3B) demonstrated the anomalous origin of the left subclavian artery. The abnormality was associated with tetrology of Fallot (Figure 3C) and atrioventricular septal defect (Figure 3D).

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