Image in cardiology

Aortopulmonary Window, Absent Ductus, and Left Subclavian Artery Isolation

Ventana aortopulmonar, ductus ausente y arteria subclavia izquierda aislada

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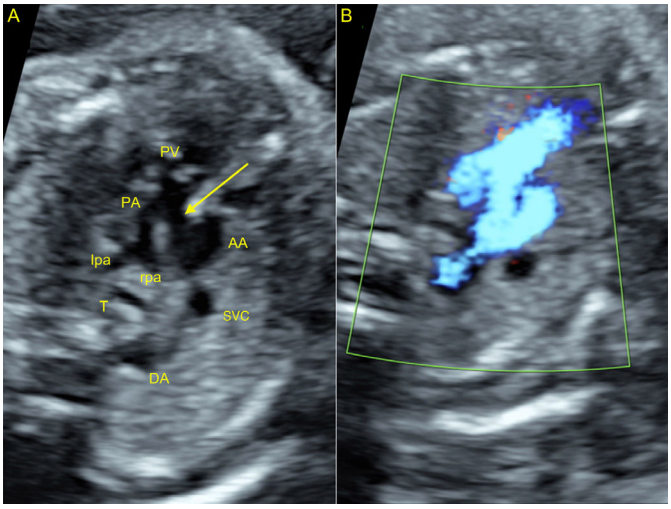

Figure 1.

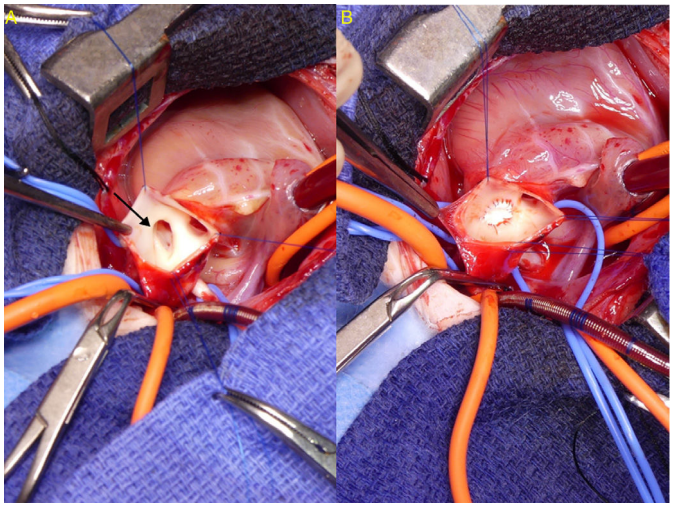

Figure 2.

A 37-year-old, gravida 2, para 0, with an unremarkable medical history, was referred at 20 + 6 weeks because of suspected right aortic arch. Fetal echocardiography (Figure 1) showed an aortopulmonary window (APW) type I (arrow, Figure 1A) with a defect communicating the main pulmonary artery (PA) and the ascending aorta (AA) proximally to the bifurcation of the PA in the right (rpa) and left (lpa) branches. The pulmonary valve (PV) and superior vena cava (SVC) are also shown. Color Doppler demonstrated the right-to-left shunt through the APW. An absent arterial duct and the descending aorta (DA) situated to the right of the trachea (T) due to a right aortic arch were also noted. No extracardiac or chromosomal abnormalities were detected.

A male neonate weighing 3360 g was vaginally delivered at 40 + 4 weeks. Treatment with diuretics and an angiotensin-converting enzyme inhibitor was initiated, and surgical closure of the APW was performed on day 9 (Figure 2): the APW (arrow in Figure 2A) was approached from the AA and a running nonabsorbable suture was used to affix a polytetrafluoroethylene patch. An isolated left subclavian artery arising from the PA was detected during the intervention and was resected and connected to the AA before the left carotid artery. The child remains well at 6 months of age.

We present this rare combination of APW, right aortic arch, absent arterial duct and an isolated left subclavian artery. These last 2 features are commonly associated with right aortic arch. The fact that the left subclavian artery arose from the PA suggests that its proximal part was composed of ductal tissue. This condition has not been previously reported prenatally.

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