Total Anomalous Connection of the Right Pulmonary Veins to the Right Atrium

Marcelo Felipe Kozak, Antônio Roberto Ledra Zagheni, Gilberto Hornburg
Centro de Diagnóstico por Imagem, Hospital Dona Helena, Joinville, Santa Catarina - Brazil

An 8-year-old boy underwent cardiac magnetic resonance imaging (CMRI) to rule out anomalous pulmonary venous connection. Contrast-enhanced MR angiography confirmed the direct drainage of the right pulmonary veins through a common vein to the postero-inferior aspect of the right atrial (RA) wall, superior to the diaphragm and close to the entrance of the inferior vena cava into the RA. The left atrium missed its left venous component. The pulmonary arteries were symmetric in size and there were no signs of right lung hypoplasia.

Keywords

Pulmonary Veins/abnormalities; Pulmonary Artery/abnormalities; Heart Atria/abnormalities; Angiography.

Mailing Address: Marcelo Felipe Kozak •
Rua Blumenau, 123, Postal Code 89204-250, Joinville, SC - Brazil
E-mail: marcelo.f.kozak@uol.com.br
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Authors' contribution

Research conception and design: Kozak MF; Data acquisition: Kozak MF; Data analysis and interpretation: Kozak MF; Manuscript writing: Kozak MF; Critical revision of the manuscript for important intellectual content: Kozak MF, Zagheni ARL, Hornburg G.

Potential Conflicts of Interests

No relevant conflicts of interests.

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This study is not associated with any graduate programs.

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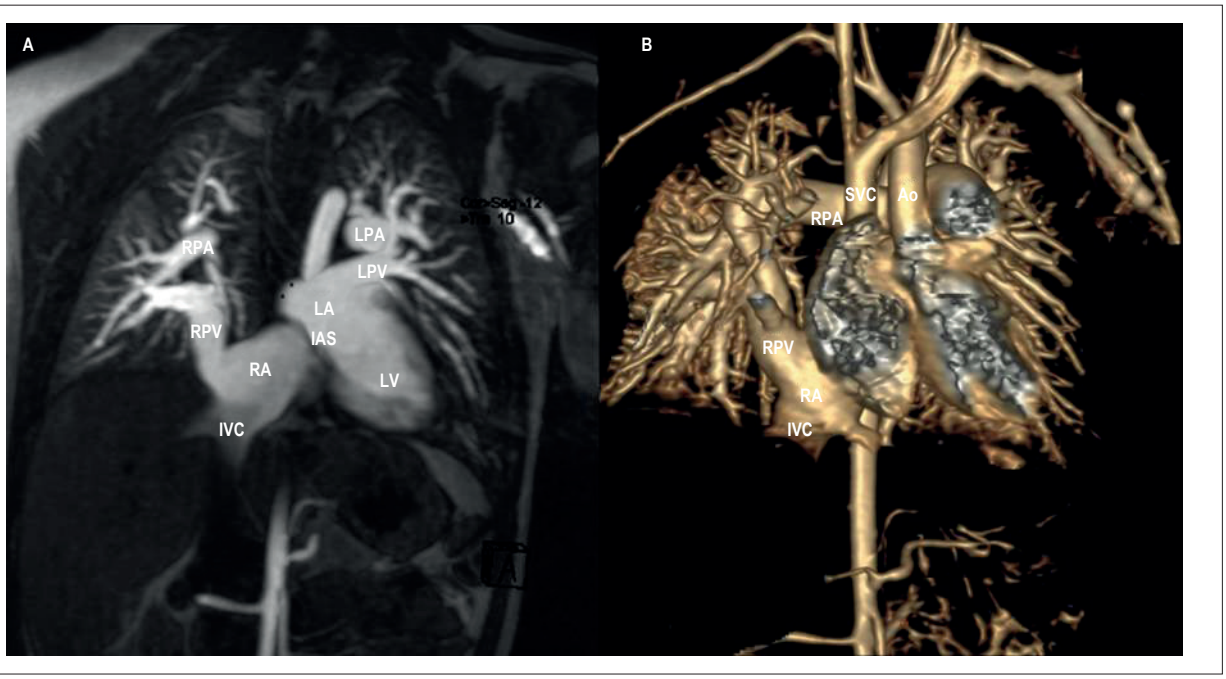

Figure 1 – *A: Maximum intensity projection (MIP) in coronal view shows the anomalous connection of the right pulmonary veins into the right atrium (RA). The intact interatrial septum (IAS) is shown, as well as the absence of the right venous component of the left atrium (LA); B: same imaging, but with volume-rendering 3D-reconstruction technique. IVC = inferior vena cava; LPA = left pulmonary artery; LPV = left pulmonary veins; LV = left ventricle; RPA = right pulmonary artery; RPV = right pulmonary veins; SVC = superior vena cava; Ao = aorta.*