Congenitally corrected transposition of the great arteries associated with partial anomalous pulmonary venous connection in a quinquagenarian with dextrocardia


Department of Cardiology, Hospital San Juan de la Cruz, Úbeda, Spain
Department of Radiodiagnosis, Hospital Universitario Reina Sofía, Córdoba, Spain

* Corresponding author. Avenida de Linares, S/N, 23400 Úbeda, Spain. Tel: +34-658610924; fax: +34-953028292; e-mail: jnlsbnll@hotmail.com

Received 14 December 2011; received in revised form 25 January 2012; accepted 8 February 2012

Keywords: Congenitally corrected transposition of the great arteries • Partial anomalous pulmonary venous connection • Dextrocardia

A 51-year old woman was treated for atrial fibrillation. A chest X-ray showed dextrocardia. Transthoracic echocardiography revealed a congenitally corrected transposition of the great arteries. Multidetector-64 computerized tomography scan imaging confirmed the diagnosis (Fig. 1) and, additionally, showed a persistent left superior vena cava and a partial anomalous pulmonary venous connection (Fig. 2).

Figure 1: Multidetector-64 computerized tomography scan imaging. (A) Systemic right ventricle (RV) connected with the left atrium (LA) and with aorta (Ao). (B) Subpulmonary left ventricle (LV) connected with the right atrium (RA) and with pulmonary artery. (C) Four-chamber view showing left and right ventricular positions, dimensions and morphologies. Inferior right pulmonary vein drains into the right atrium (asterisk). (D) Three-dimentional reconstruction, anterior view, showing atrioventricular and ventriculoarterial discordance, as well as the anatomy of the left atrial appendage (arrow).

Figure 2: Multidetector-64 computerized tomography scan imaging. Three-dimentional reconstruction, posterior view. Left pulmonary veins (arrows) drain into the left atrium (blue) and right pulmonary veins (asterisks) drain into the right atrium (pink). CS: coronary sinus; IVC: inferior vena cava; PLSVC: persistent left superior vena cava; SVC: superior vena cava.