Venous Collector in a Case of Partial Anomalous Pulmonary Venous Drainage

María J. Mataró, MD, Juan Otero, MD, Gemma Sánchez-Espin, MD, Nieves Alegre, MD, Carlos Porras, MD, Emiliano Rodríguez, MD, PhD, Isabel Rodríguez-Bailón, MD, Arantza Guzón, MD, Miguel Such, MD, PhD, and José M. Melero, MD

Departments of Cardiac Surgery, Radiology, and Cardiology, Hospital “Virgen de la Victoria,” Málaga, Spain

We report on a 43-year-old woman with partial anomalous pulmonary venous drainage (PAPVD) diagnosed by cardiac magnetic resonance imaging. Echocardiography did not show an interatrial septal defect. Computed tomography angiography confirmed the presence of PAPVD of the superior and medium lobar veins into the right atrium (RA). Next to this connection was a lateral venous collector connecting the RA to the left atrium (LA) (Fig 1: red arrows show the venous collector and blue arrows show the pulmonary veins).

The patient was scheduled for a cardiac operation. After a median sternotomy, cardiopulmonary bypass was established by cannulation of the right jugular vein and inferior vena cava. After cross-clamping, the RA was opened through an oblique incision extending toward the superior vena cava (SVC). We identified the PAPVD of the superior and medium lobar veins draining separately into the RA just below the insertion of the SVC. Close to this connection, we found the orifice of a venous collector, about 15 × 40 mm, which allowed communication of the RA with the left atrium. The interatrial septum was intact. The drainage of pulmonary veins was rerouted into the collector thanks to the implantation of an autologous pericardial patch using a running 4-0 polypropylene suture. A bovine pericardial patch was used to enlarge the SVC. Transesophageal echocardiography showed competence of the patch (Fig 2: the blue arrows show the limits of the venous collector and the red arrow shows the pericardial patch). The patient had a satisfactory postoperative recovery.

Address correspondence to Dr Mataró, Department of Cardiac Surgery, Hospital “Virgen de la Victoria,” Campus Teatinos S/N, 29010, Málaga, Spain; e-mail: mjmataro@hotmail.com.