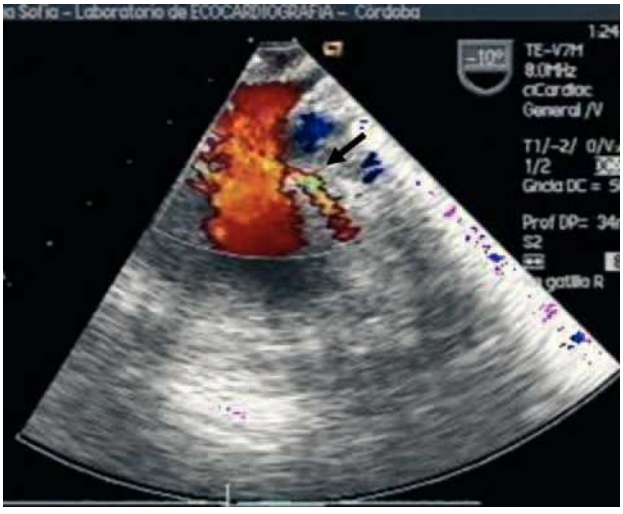

Figure 1.

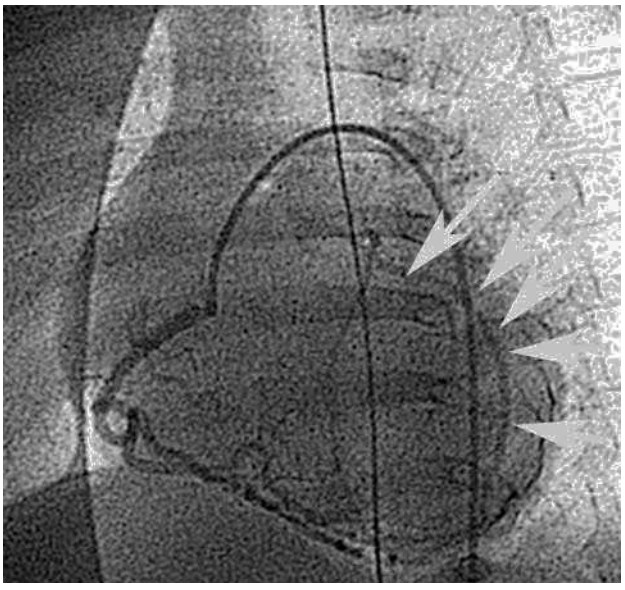

Figure 2.

Anomalous Origin of the Left Coronary Artery From the Pulmonary Artery: Diagnosis by Transesophageal Echocardiography in an Infant

Echocardiography has proven to be useful for noninvasive diagnosis of an anomalous origin of the left coronary artery in the pulmonary artery. In published cases in adults, the transesophageal study has been highly valuable for detecting this anomaly. The images we now present demonstrate that transesophageal echocardiography with use of the multiplanar pediatric probe is useful for the diagnosis of this condition in infants.

A 4-month-old female infant was seen for several episodes of respiratory difficulty in the previous weeks. The chest x-ray disclosed enlargement of the left atrium and left ventricle. The left electrocardiogram showed isolated left ventricular hypertrophy with no Q-waves, and the transthoracic echocardiogram demonstrated severe mitral regurgitation and anterior hypokinesia. A diagnosis of anomalous origin of the left coronary artery was suspected and a transesophageal study with a multiplanar pediatric probe was performed. The origin of the left coronary artery was demonstrated in the pulmonary trunk (Figure 1). The diagnosis was later confirmed by cardiac catheterization. Following selective angiography, it was observed that the right coronary filled the left coronary artery with an anomalous origin in the pulmonary artery through collateral vessels (Figure 2). The patient was treated surgically using a technique of transfer of the left coronary artery to the aorta, with an evident improvement in the left ventricular function and a spectacular reduction in the grade of mitral regurgitation, which was mild on the transthoracic echocardiography follow-up study at discharge.

Javier Ariza, Dolores Mesa, and Manuel Pan
Servicio de Cardiología, Hospital Reina Sofía, Córdoba, Spain.