

IMAGES IN CARDIOLOGY

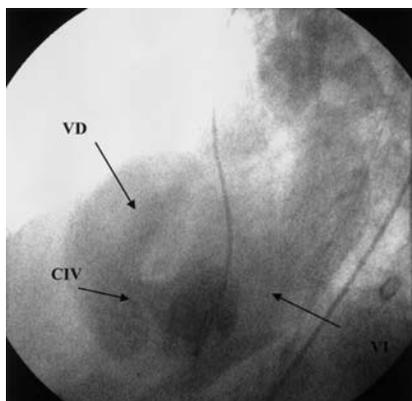


Fig. 1.

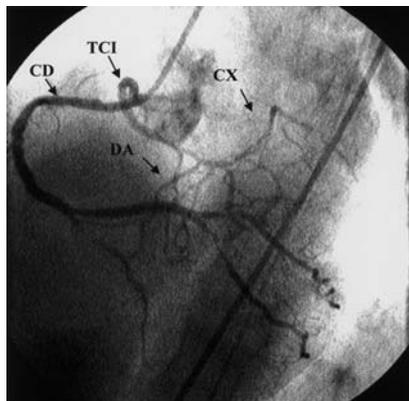


Fig. 2.

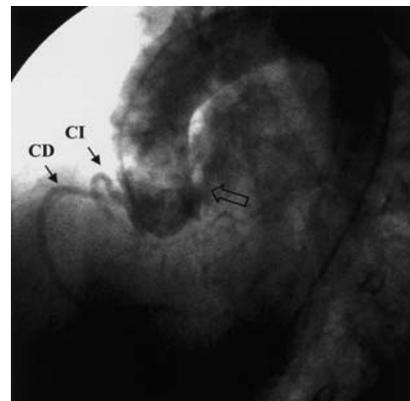


Fig. 3.

Apical Postinfarction Ventricular Septal Defect and Anomalous Origin of Left Coronary Artery

The patient was a 63-year-old woman with a history of high blood pressure, obesity, and stable effort angina. She was admitted for uncomplicated acute inferior myocardial infarction. On day 3, clinical signs of progressive heart failure appeared, with a harsh pansystolic murmur in the mitral focus irradiated to the right sternal edge. She developed cardiogenic shock and required inotropic medication and intra-aortic balloon counterpulsation. Transesophageal echocardiography disclosed left ventricular (LV) inferior akinesia, right ventricular (RV) dilation with severely impaired systolic function, and a large ventricular septal defect (VSD) in the apical septum. Left ventriculography (left oblique anterior view) confirmed the existence of an apical VSD and its dimensions (Figure 1). Coronariography and aortography (Figures 2 and 3) detected the anomalous origin of the left coronary artery trunk (LCT) on the proximal segment of the right coronary artery (RC). The anterior descending (AD) and circumflex (CX) coronary arteries were poorly de-

veloped. The AD, posterior interventricular (PIV), and posterolateral coronary arteries were stenotic. The patient underwent emergency surgery to close the VSD with a Teflon patch and coronary *bypass* with the internal mammary artery to the first diagonal. The postoperative evolution was satisfactory and at 5 months she was asymptomatic.

The association of an apical VSD and inferior infarction is uncommon. In this patient, this association was due to the poor development of the anomalous left coronary artery, with a small anterior descending coronary artery and septal branches. As a result, the septal vessels dependent on the PIV irrigated the septum.

Salvatore Di Stefano,
Joaquín J. Alonso
and Santiago Flórez

Instituto de Ciencias del Corazón (ICICOR),
Hospital Clínico Universitario de Valladolid,
Valladolid, Spain.