IMAGES IN CARDIOLOGY



Fig. 1.

Dual Left Anterior Descending Coronary Artery Type IV

A 72-year-old man with diabetes and hypertension was seen for exertional angina of recent onset. The electrocardiogram showed complete left bundle branch block. Thallium-201 stress testing demonstrated a reversible lateral perfusion defect. The patient then underwent coronary arteriography. The left main coronary artery showed no lesions. The left anterior descending coronary artery (LAD) was short and terminated in the proximal third of the interventricular sulcus (IVS); it sent off septal arteries and one diagonal branch. The LAD and the diagonal branch had severe lesions. The circumflex coronary artery (Cx) was poorly developed and showed a severe lesion proximal to the outlet of the first obtuse marginal artery, which presented two other lesions (Figure 1A). A vessel originated from the proximal segment of the dominant right coronary artery (RC), coursed in front of the pulmonary artery to the IVS and descended from there to the apex, sending off septal branches along its course. Severe lesions were seen in the medial third of both the RC and posterior descending artery (Figure 1B).

Spindola-Franco have described four types of dual LAD. In three of them the LAD divides into two branches, a short one that feeds the proximal third of the septum and a long one that initially leaves the IVS and courses along the left ventricular side (type I), the right ventricular side (type II) or follows an intramyocardic course (type III), and then reenters the IVS to reach the apex. Type IV, in which a long LAD arises from the RC, is the least common variant, and is the one we observed in our patient.

Angela Flox Camacho, Rafael Salguero Bodes, and Felipe Hernández Hernández Unidad de Hemodinámica, Servicio de Cardiología, Hospital 12 de Octubre, Madrid, Spain.

Full English text available at: www.revespcardiol.org