Myocardial Bridging and Fractional Flow Reserve

A 69-year-old patient with a history of hypertension was admitted to the hospital for an acute coronary syndrome. Coronary arteriography showed a myocardial bridge at the mid-distal third of the left anterior descending artery with marked systolic compression. The fractional flow reserve (FFR) following intravenous infusion of adenosine (140 µg/kg) was 0.68. Since an FFR value <0.75 had been documented, it was not necessary to repeat the measurement with dopamine inotropic stimulation, as has been recommended for functional assessment of myocardial bridges. The presence of a diastolic gradient in this patient suggests that the diastolic flow in the intramyocardial segments, particularly in the anterior descending artery, may be affected. The patient has continued with medical treatment (beta-blockers). Occasional exertional angina persists and he has not required hospitalization for cardiovascular causes for the last 3 years.

José M. Hernández-García, Juan H. Alonso-Briales, and Eduardo de Teresa
Servicio de Cardiología, Hospital Universitario Virgen de Victoria, Málaga, Spain.

Figure.