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Commentary: A wide road is better than a simple bridge

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CENTRAL MESSAGE

In Takayasu aortitis, conventional coronary artery bypass may provide bad long-term patency; hence, in selected cases a coronary ostial plasty using superficial femoral artery patch may be the best choice.

Takayasu aortitis commonly presents in the second or third decade of life, often with a delay in diagnosis from the onset of first symptoms of months to years.[1] In the first reported case, in 1830,[2] Yamamoto described a patient with persistent fever who developed impalpable upper limb and carotid pulses associated with weight loss and dyspnea. Further description, including that by Takayasu, suggested a wide involvement of arteries by chronic inflammation with high risk of stenosis and ischemia.[2] Coronary involvement in patients with Takayasu aortitis is not so rare, between 10% and 30% of cases at conventional coronary angiography, but even higher (53%) when diagnosis is made by 128-section dual-source computed tomography angiography.[3-5] In a report of 24 patients with angiographic evidence of coronary lesions, ostial involvement was revealed in 87.5% of cases, most of them were women.[5] Endo and colleagues[5] submit 23 out of 24 cases to coronary surgery. In most of the cases (19 patients) coronary artery bypass grafting was performed, either directly on left main coronary artery in 10 patients or conventionally in 9 patients. In 1 patient, they performed ostial patch angioplasty using a patch derived from proximal portion of free right internal thoracic artery, after performing a percutaneous transluminal coronary angioplasty. The innovation introduced by Oishi and colleagues[6] is the use of a patch derived from the superficial femoral artery that seems to be much less involved in the inflammatory process typical of Takayasu vasculitis and this obviously benefits a long patency. In this case, at 15 years the left main coronary artery remains patent.

Conversely, the patency of saphenous veins, which are used in 80% of patients with Takayasu aortitis is very low: 60% at 4 years. In fact, in conventional coronary artery bypass grafting for Takayasu arteritis, graft occlusion occurs mainly at the proximal anastomotic site because of intimal thickening of the aorta.[7] The take-home message from this case report is that in selected cases, a wide road is better than a simple bridge.

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