

Apico-Aortic Conduit as an Option in Severe Aortic Stenosis

Conducto ápico-aórtico como alternativa en la estenosis aórtica severa

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This image corresponds to an apico-aortic conduit (or bypass) as treatment for symptomatic severe aortic stenosis in a 94-year-old male patient with porcelain aorta and severe peripheral vascular disease. This technique had been proposed by Alexis Carrel in 1910, and first developed by Templeton in 1963 in a series of 5 cases, with a patient presenting a 10-year survival. The development of prosthetic valve replacement first, and percutaneous valvuloplasty and percutaneous implantation later, restricted this type of procedure to a few surgical groups and to particular situations. Today, in certain cases the risk for conventional valve replacement may be high or prohibitive, and percutaneous implantation may be extremely difficult, as is the case of the mechanical prosthesis in aortic position or the extreme proximity of the valve plane to the coronary arterial ostia. In such circumstances, the apico-aortic conduit could exceptionally represent an option to relieve aortic stenosis, generating a parallel communication between the left ventricular apex and the descending aorta that effectively increases left ventricular ejection, avoiding manipulation of the aortic valve, the ascending aorta, and the aortic arch. The image included corresponds to this procedure.

Conflicts of interest

None declared (See authors' conflicts of interest forms on the website/ Supplementary Material).

