

LETTER TO THE EDITOR

Calculated Reduction Aortoplasty for Dilatation of the Ascending Aorta Associated with Aortic Valve Replacement

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We read with great interest the article by Dr. Stavridis and his colleagues about the management of a dilated ascending aorta in patients programmed for aortic valve replacement (AVR) [Stavridis 2004]. The authors must be congratulated for the simple and reproducible technique described in their paper. Indeed, leaving such a dilated aorta totally untreated during AVR surgery exposes the patient to late acute type A aortic dissection, which is particularly difficult to treat in redo configuration and is associated with a very high mortality rate. In our center and from our own experience [Albat 1992], we consider performing specific surgery for aortic dilatation during AVR if the aortic diameter measured before and during operative procedures reaches 45 mm.

However, all surgical techniques leaving a pathologic aorta in place (aortic wall-sparing techniques) leave the patient at continued risk for aortic enlargement and type A aortic dissection. In consequence, we believed that these techniques can be avoided in patients younger than 65 years, especially if they have aortic valve insufficiency, which is usually associated with a degenerative aortic wall.

To summarize, our technical choice concerning the ascending aorta during AVR is based on 5 factors: the diameter of the supracoronary aorta and Valsalva sinuses (more or less than 45 mm), the type of aortic valvular disease (insufficiency or stenosis) requiring surgery, the macroscopic appearance of the aortic wall (thin or not) during surgery, severe arterial hypertension or not, and the patient's age, which to us is at present the most important factor in our decision.

A patient older than 65 years with predominant aortic stenosis will benefit from conservative reduction aortoplasty with external grafting [Robicsek 1971] or the placement of 2 large felt strips surrounding the aorta and anchored in the aortic wall. In younger patients, we consider prosthetic replacement of the supracoronary ascending aorta (or Bentall procedure if required) to be the best solution for preventing future aortic dissection. In fact, we reserve these aortic wall-sparing techniques for older patients (usually older than 65 years) with predominant aortic stenosis and aortic wall jet lesion. However, patients receiving this treatment should be carefully monitored for redilatation after the procedure [Arsan 2004]. We have obtained satisfactory long-term results with this policy.

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