EDITORIAL COMMENT

Surgery for aneurysms of the ascending aorta: keep it simple, safe and straightforward

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Aneurysms of the ascending aorta need to be attacked surgically in order to prevent catastrophic events such as aortic dissection and/or aortic rupture. Since both of these circumstances are related to the highest mortality in cardiovascular diseases, it is crucial to try to avoid these calamities. A lot of debates have been held on the exact timing of the prophylactic aortic repair. Among other things, the size of the aneurysm, the body surface area, the age and the underlying pathology are of paramount importance, as well as the experience of the surgical team.

This paper by Kallenbach et al. [1] from Heidelberg describes the results of the analysis of 548 patients operated upon for an ascending aortic aneurysm over a 17-year time period. It is important to remark that aortic dissections are not included in this series; it is a heterogenous population of elective aneurysms of the ascending aorta ≥50 mm. Although there are some emergent cases included, it is not clear if this is because of rupture or just because of their emergent clinical presentation.

The overall 30-day mortality is 4.8%, which is relatively high, but it becomes excellent when the last 381 patients after 2006 are analysed, only 1.6%. Three surgical techniques are used: composite (mechanical or biological) graft replacement in about 50%, supracommissural aortic replacement in about 30% and valve-sparing interventions (Yacoub or David) in about 20%.

Probably, the most important message derived from this paper is that it does not matter which surgical technique is to be used. In general, short-term and long-term outcomes are excellent, with a reoperation rate on the aortic root, mainly after valve-sparing operations, of only 1% over a mean follow-up time of 4 (0–17) years. Dissections and ruptures are avoided.

The reader should get the point: keep it simple and safe, optimal results will follow automatically. No mini-sternotomies for complex aortic surgery, safe antegrade cerebral perfusion in the case of extension into the arch, the use of straightforward surgical techniques and optimal cardioprotection using again conventional but proven antegrade cardioplegia. However, this is actually the difficulty. A lot of surgeons are overwhelmed by all kinds of alternatives, often inspired and semi-imposed by industry, losing the fragile balance between classic surgery with good and proven results and attractive novelties with uncertain and dubious outcomes. It does not matter if you perform a composite graft replacement, a supracommissural replacement or a valve-sparing procedure after inspection of the root taking into account the specific pathology, but you have to do it in a decent and appropriate way. The results presented in the paper by Kallenbach et al. [1] are a reflection of the ‘deutsche Gründlichkeit’ (German efficiency), but they also prove that complex surgical problems have to be solved in a simple and straightforward procedure that will yield optimal results.

REFERENCE