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Commentary: Strategic surgery to type A dissection: A bird in the hand or 2 in the bush?

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Congratulations to the authors. Uchida and colleagues¹ show that in the setting of acute type A aortic dissection mortality for both a limited strategy of replacing the ascending aorta or hemi-arch (AAR), and an extensive strategy of total arch repair (TAR) with classic or frozen elephant trunk, were only 7.1% and 6.0%, respectively; thus, even better than recently published results from peers quoting 10.4% and 11.3%, respectively.² Because TAR was associated with less-frequent late distal complications or events after years of follow-up, they concluded to recommend changing from an entry-oriented strategy to prolific use of TAR even instead of AAR to prevent those late distal events and thereby improving quality of life (QoL).

A stark statement, but is it based on solid foundation? First, the study design is retrospective over 12 years, neither randomized nor controlled, and rather a report on the experience with 253 patients managed in a single center of excellence. We are not sure that the ivory tower

Type A dissection with AAR followed by staged TEVAR completion later for expansion.

CENTRAL MESSAGE

A postponed secondary elective surgery or endovascular repair could be embraced for strategic risk control in the setting of type A dissection.

experience justify a strategic change of management on the ground. Second, the currently popular standard strategy focusing on entry exclusion, obviously in the spirit of Kazui and colleagues,³ has led to some preselection of 2 out of 3 patients for AAR/hemiarch versus 1 out of 3 for the more extensive TAR, both with excellent mortality figures despite different demographics. Without any risk adjustment made, TAR was applied to younger and more stable patients, whereas AAR requires more frequent additional surgery (eg, root replacement, bypasses, and more) in a sicker and older population; this is likely to skew survival rates and render it difficult to justify any expanding use of TAR to less stable patients in their current AAR population for the sake of fewer distal problems in the future. Third, and of note those reported differences regarding late peripheral events and QoL are at best assumptions considering a late rupture rate of only 3.6% after TAR versus 2.9% after AAR, and with no mentioning of any measures of QoL. Moreover, late events such as degeneration of the distal aorta

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can certainly be managed by endovascular solutions and do not require necessarily open surgical repair anymore.

Finally, and moving forward, what can be learned from this compelling experience in Japan? With varying complexity of surgery in proximal dissection, dedicated aortic surgeons have different choices, but they need experience to make decisions, and competence to execute even complex surgical interventions such as TAR. Experienced aortic surgeons can achieve excellent short- and long-term results even with complex aortic procedures such as TAR; but this setting reflects an ideal scenario that is in contrast to day-to-day reality because patients are in the hands of cardiac surgeons who are in general less experienced in complex aortic surgery. Complex TAR is often not essential to save the life of a critically ill patient in acute type A dissection. The ultimate reward should be the best outcome minimizing both hospital death and complications. A postponed secondary elective surgery or endovascular repair could be embraced for strategic risk control as surveillance and follow-up is recommended anyway. The excellent survival figures actually corroborate and confirm the standard approach of resection/

closure of proximal entry tears as a prerequisite for surgical success and low mortality,⁴ keeping the element of adventure to a minimum. The data discussed here certainly prove the competence of dedicated expert surgeons; however, are not convincing or granular enough to deviate from the current strategy of proximal entry tear resection/exclusion for our patients with type A aortic dissection, but rather promote an individualized approach.⁵

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