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See Article page 1.

Commentary: Do not close a door that opens a window!

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Total arch replacement (TAR) and hemiarch/ascending aorta replacement (nTAR) are both considered the surgical standard of care for the treatment of acute type A aortic dissection (ATAAD) according to the location of the intimal tear into the aortic arch.¹ It is still controversial whether an aggressive approach to ATAAD by performing a TAR can provide better results than a less aggressive surgery.² However, it has been highlighted that the residual entry tear may carry the risk of causing a progressive aortic dilatation during follow-up, increasing the probability of aortic reoperation and late mortality.³ White and colleagues⁴ performed a literature review regarding the behavior of aortic true lumen and false lumen (FL) after surgery, the distal anastomotic new entry tear (DANE), and their influence on the prognosis and, therefore, strategies to improve it.

White and colleagues⁴ discuss the influence of the FL at the presentation of ATAAD and its implication on organ malperfusion, which still is among the most fearful complications.⁵ Indeed, even after surgery, a pressurized FL has a strong influence on survival (as low as 42%) and aortic reinterventions, in whom an FL was patent in up to 96% of patients. Moreover, the authors supported the thesis that a DANE permits a continuous FL

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CENTRAL MESSAGE

The authors review the literature on type A dissection to address its influence on immediate outcomes and prognosis of false lumen and distal anastomotic new entry tear, and strategies to avoid them.

pressurization, leading to a negative aortic remodeling because, over time, it behaves as a primary entry tear. A DANE, therefore, carries a strong negative influence on survival and aortic events. Given this premise, White and colleagues⁴ provide an interesting summary on strategies to prevent DANE. The authors, in fact, strongly encourage total aortic in all patients, regardless the position of entry tear. The described solution is the employment of frozen elephant trunk,^{6,7} to move DANE downstream and, in case of failure of closure, an endovascular second-stage approach is still doable. Moreover, it has been shown that, despite being TAR technically more challenging and with higher risk of early mortality than nTAR, it is possible to equalize the gap between TAR and nTAR through institutional experience.⁸

What can we learn by reading the review by White and colleagues?⁴ First of all, a comprehensive and updated explanation on pathophysiological mechanisms of ATAAD, focusing on the effect of FL and DANE. Second of all, interesting considerations are added to the ongoing debate between choosing a less aggressive strategy versus a more aggressive strategy to treat ATAAD.

In a nutshell, if God never closes a door, without opening a window, aortic surgeons must shut all the entries.

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