

# Letter to the Editor: Acute Aortic Dissection Type A; Impact Of Aortic Specialists on Short and Long Term

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## Title Page

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## Letter:

To the Editor,

The article "Acute Aortic Dissection Type A: Impact of Aortic Specialists on Short and Long-Term Outcomes" by Habib et al.<sup>1</sup> has been read with great enthusiasm. The concisely written article was a privilege to read, and we applaud the authors' endeavors. The authors have cogently written a wide range of scenarios. Acute Aortic Dissection Type A (AADTA) improves short-term and long-term fatality ratios, postoperative consequences, and the proportion of patients handled by Aortic Specialists Surgeons (ASS) and General Cardiac Surgeons (Non-ASSs).

We agreed that AADTA patients should undergo surgery immediately to prevent blood loss, protect vital organs such as the brain, kidneys, and heart, and enable a healthy, prosperous life for the patient.<sup>2,3</sup> AADTA is associated with a high mortality rate, with the majority of untreated patients dying within two weeks. However, we would like to add a few points that, in our opinion, would improve the quality of this article

and add to the existing knowledge of this fatal disease. First, we assume that a variety of treatments are available for AADTA treatment. The authors have not highlighted alternative therapies such as Invasive Endovascular Treatment (IET).<sup>4</sup> Despite good surgical results, there is still a risk for morbidity and mortality in elderly patients at high risk for surgery.<sup>4</sup> The endovascular repair will gain popularity as an alternative treatment for ascending aortic disease in selected high-risk patients, but more research is needed.<sup>4</sup> AKI was diagnosed in 382 of 941 patients (40.6%), including 105 (11%) postoperative patients. There was preoperative malperfusion of the kidneys (5.1%), of which 69.0% developed AKI.<sup>5</sup> AKI is a common complication after surgery for AADTA, and it predicts adverse long-term outcomes independently. However, one-third (1/3) of patients presenting with renal malperfusion did not develop postoperative AKI, possibly because surgical repair restored renal blood flow.<sup>5</sup>

The authors should have also described the critical condition of Cranial Stroke. Twenty percent (38/189) of patients undergoing AADTA repair had stroke (58% unilateral, 43% bilateral [p =.33]). All strokes were ischemic in nature. The causes of ischemic stroke were embolic (58%), hypoperfusion (26%), mixed (11%), and unknown (5%). There was no correlation between intraoperative variables and neuroanatomy or stroke mechanism. 40% (n = 15) of patients presented with preoperative carotid dissection, while 10% (n = 4) developed intracranial large vessel occlusion following surgery (LVO). Strokes related to AADTA are severe at presentation, resulting in significant disability. 6 One in ten ischemic strokes are caused by LVO and may be treatable endovascularly.<sup>6</sup> Stroke prevention is complicated by its heterogeneous location and etiology. Given advancements in endovascular therapy,<sup>6</sup> future trials may evaluate the significance of early neuroimaging and concurrent stroke treatment.

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