Letter to the Editor: Anatomical reasons for failure of dual-filter cerebral embolic protection application in TAVR: A CT-based analysis

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To the Editor:

An article published recently by Stephanie Voss et al.¹ "Anatomical reasons for failure of dual-filter cerebral embolic protection application in TAVR: A CT-based analysis" has interested us in it as it provides a vast amount of knowledge to its readers. The authors did remarkable work in trying to explain the relationship and tried to convey it as best they could. We would certainly not hesitate to state that it was a pleasure to read such incredible work by the authors. We agree with the authors that specific anatomical reasons may lead to dual-filter cerebral embolic protection failure. However, we would like to highlight a few points that would improve the quality of the document by mentioning them.

Considering the limitation of the study, this study may raise concerns as its design is retrospective and may be prone to reporting bias which may lead to incongruous documentation; the results would be better if they included data of present times. This study may also be jeopardized because results may also show publication bias as included participants are from one selected location; the results could be more accurate if they had conducted a multicenter study design. In addition, the authors in this article have missed to mention the history of calcification and the different diameters in which the filter was placed, as other studies have mentioned with proper diameters found in the patient.² We would also like to enlighten a point that the authors could have mentioned in this study and explain which type of stroke was found as they are two types of stroke, such as Acute or sub-acute stroke, which has been mentioned in one study.³ The authors intended to mention only the history of strokes and strokes as a serious complication without mentioning its type. Furthermore, this study has mentioned in its limitation that they have not assessed any neurological outcome, which is a major concern in this study as in one study they had assessed this outcome and have mentioned that their neurological outcomes were better as they found a significant amount of reduction in imaging markers of cerebral infarction by using intraprocedural embolic protection during TAVR.⁴ Another point that the authors should have mentioned was the histopathology of the embolus as mentioned in one study, which would have helped this study to interpret more reasons for the failure of the dual filter cerebral embolic protection application in TAVR.⁵

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