

Response to 'comments on the article 'sex differences in the epidemiology of spontaneous and traumatic cervical artery dissections"

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Correspondence to Dr Elke Schipani; schipani.elke@mayo.edu We value the interest in our work (Schipani *et al*)¹ expressed by Zhang *et al*² in their recent letter to the editor. We welcome the opportunity to respond and offer the following clarifications.

Traditionally, spontaneous and traumatic cervical artery dissections (CeAD) have been classified separately. However, despite conflicting results from observational cohorts,³ there is currently no convincing evidence supporting significant differences in the underlying pathophysiology between the two types. Therefore, we believe this distinction to be arbitrary.

Regarding the recommendation from Zhang et al to stratify the analysis based on risk factors, we note that doing so would significantly reduce the sample size in each subgroup, which would, in turn, diminish the power of the analysis and the ability to detect meaningful differences. Moreover, such an approach falls outside the primary scope of our investigation, which focused on an exploration of sex differences in CeAD. Lastly, we acknowledge that the relatively small sample size in our study is a limitation, and we agree that our findings require validation with larger cohorts. We hope our work catalyses future studies that can build on these preliminary insights and provide more robust evidence.

We appreciate the thoughtful engagement of Zhang *et al* and look forward to ongoing discussions in this area of research. X Elke Schipani @ElkeSchipani and Zafer Keser @zaferkeserMD

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