

## Comments on the article 'Sex differences in the epidemiology of spontaneous and traumatic cervical artery dissections'

Xiao-mei Zhang, 1 Gang Wang 10 2

To cite: Zhang X, Wang G.
Comments on the article 'Sex differences in the epidemiology of spontaneous and traumatic cervical artery dissections'. Stroke & Vascular Neurology 2025;0. doi:10.1136/svn-2024-003904

Received 25 November 2024 Accepted 17 December 2024



© Author(s) (or their employer(s)) 2025. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ Group.

<sup>1</sup>Department of Rheumatology and Immunology, Shengjing Hospital of China Medical University, Shenyang, China <sup>2</sup>Department of Neurosurgery, The First Hospital of China Medical University, Shenyang, Liaoning, China

## **Correspondence to**

Dr Gang Wang; neurowang@163.com We recently read with great interest the article 'Sex differences in the epidemiology of spontaneous and traumatic cervical artery dissections'. The authors conducted a retrospective analysis of 144 patients with cervical artery dissection (CeAD), revealing important sexrelated differences that offer valuable insights for clinicians. Despite the quality of the work, we believe the study has several limitations that should be addressed.

First, traumatic CeAD and spontaneous CeAD are conventionally considered distinct mechanisms.<sup>2</sup> Combining them in a single analysis may compromise the precision and reliability of the conclusions. Moreover, several other factors contribute to a patient's risk of CeAD, including connective tissue disorders, acquired conditions such as infection and hypertension, and anatomical aberrations like elongated styloid processes.<sup>3</sup> We recommend further stratifying and analysing the data to address these factors.

Another issue pertains to the statistical methods employed. While the methods themselves are appropriate, the small sample size and the multiple comparisons increase the risk of false positives. We suggest applying corrections like the Bonferroni adjustment to mitigate this risk and strengthen the robustness of the results.

In conclusion, while the study provides valuable insights, we feel that its persuasiveness

is limited by these issues, and additional research is needed to validate the findings.

**Contributors** The conception was first raised and designed by GW. XZ was the major contributor in drafting the manuscript. All authors read and approved the final manuscript.

**Funding** The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

**Competing interests** None declared.

Patient consent for publication Not applicable.

Ethics approval Not applicable.

**Provenance and peer review** Not commissioned; internally peer reviewed.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/.

## ORCID ID

Gang Wang http://orcid.org/0000-0001-7612-2977

## **REFERENCES**

- 1 Schipani E, Griffin KJ, Oakley CI, et al. Sex differences in the epidemiology of spontaneous and traumatic cervical artery dissections. Stroke Vasc Neurol 2024.
- 2 Keser Z, Chiang CC, Benson JC, et al. Cervical Artery Dissections: Etiopathogenesis and Management. Vasc Health Risk Manag 2022;18:685–700.
- 3 Yaghi S, Engelter S, Del Brutto VJ, et al. Treatment and Outcomes of Cervical Artery Dissection in Adults: A Scientific Statement From the American Heart Association. Stroke 2024;55:e91–106.



