

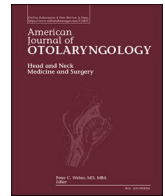


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Regarding “Cranial nerve involvement in COVID-19”

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Dear Editor,

We read with great interest the article Doblan et al. entitled “Cranial nerve involvement in COVID-19” [1]. The authors, often finding cranial nerve injury symptoms in patients infected with SARS-CoV-2, conclude that this virus has more neurotrophic and aggressive neuroinvasion. The authors stated, among other things, symptoms of nerve VIII damage (loss of hearing, dizziness, tinnitus) in 52 out of 302 subjects (17.2%). We are concerned with the remarks made at the end of the Doblan et al. study that symptoms of cranial nerves' involvement completely disappear within the first month of the SARS-CoV-2 infection. We consider it too optimistic to claim, especially for patients with sudden sensorineural hearing loss (SSNHL - sudden deafness), that symptoms of the cranial involvement caused by the SARS-CoV-2 often do not require any special treatment.

In 2012, a team of experts from the American Academy of Otolaryngology-Head and Neck Surgery developed guidelines for managing SSNHL, specifying, among other things, systemic and/intra-tympanic (IT) steroid therapy as first-line therapy. If there is a possibility of application - steroid therapy can be supplemented with hyperbaric oxygen treatment. Clinicians may offer hyperbaric oxygen therapy within 3 months of diagnosis of SSNHL [2]. In 2019, a team of experts from the American Academy of Otolaryngology-Head and Neck Surgery in a similar composition made changes to these recommendations, including leaving hyperbaric oxygen therapy remains an option but only when combined with steroid therapy for either initial treatment or “salvage therapy”. The timing of initial therapy is within 2 weeks of onset, and that of “salvage therapy” is within 1 month of sudden sensorineural hearing loss [3]. These recommendations have been widely accepted and introduced into clinical practice [4].

We believe that any recommendations included in scientific work, even in the form of an impression, should be more balanced and consider the outcome they might cause. We would kindly ask the medical

personnel reading the by Doblan et al. entitled “Cranial nerve involvement in COVID-19” to consider our point of view on the need for special treatment if SSNHL occurs of symptoms caused by SARS-CoV-2.

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None.

Declaration of competing interest

None.

References

- [1] Doblan A, Kaplama ME, Ak S, Basmacı N, Tarini EZ, Goktas SE, et al. Cranial nerve involvement in COVID-19. *Am J Otol* 2021;42(5):102999. <https://doi.org/10.1016/j.amjoto.2021.102999>.
- [2] Stachler RJ, Chandrasekhar SS, Archer SM, Rosenfeld RM, Schwartz SR, Barrs DM, et al. Clinical practice guideline: sudden hearing loss. *Otolaryngol Head Neck Surg* 2012;146(1S):S1–35.
- [3] Chandrasekhar SS, Tsai BS, Schwartz SR, Bontempo LJ, Faucett EA, Finestone SA, et al. Clinical practice guideline: sudden hearing loss (update). *Otolaryngol Head Neck Surg* 2019;161(1S):S1–45.
- [4] Narożny W, Sičko Z, Przewoźny T, Stankiewicz C, Kot J, Kuczkowski J. Usefulness of high doses of glucocorticoids and hyperbaric oxygen therapy in sudden sensorineural hearing loss treatment. *Otol Neurotol* 2004;25:916–23.

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