Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Letter to the Editor

Bell's palsy development during SARS-CoV-2 infection

To the Editor,

I have some comments and concerns on the article by Theophanous et al. [1]. They reported a 6-year-old male who has hyper IgM syndrome (HIGM) and Bell's palsy development during severe acute respiratory syndrome coronavirus- 2 (SARS-CoV-2) infection. **Firstly**, we want to know about patient's type of HIGM, which give us an opportunity to make a comment on the level of his immunodeficiency. Although HIGM has four subtypes, he probably has X-linked CD40 ligand (CD40L) deficiency. **Secondly**, Bell's palsy associated with SARS-CoV-2 in children have been reported by some other researchers after this report [2,3]. I disagree with the authors and think that Bell's palsy is not a coincidental finding alongside the SARS-CoV-2 infection. Also, Bell's palsy in children seems to happen with SARS-CoV-2 infection without having any immunodeficiency [2,3].

Thirdly, suspecting SARS-CoV-2 infection simply upon the existence of facial palsy with PCR positivity is misleading and a causal relation is confirmed as coronavirus disease 2019 (COVID-19) manifests with various clinical features. In their patient, there was almost no SARS-CoV-2- related symptoms. This patient has also chromosomal abnormalities and other atypical clinical features, which could be related to any nerve palsy. They might have considered performing additional nerve conduction studies, cerebral imaging, and the cerebrospinal fluid evaluations in the differential diagnosis [4]. While some researchers have advocated that current pandemic increased the frequency of Bell's palsy, others did not agree and recommended confirming SARS-CoV-2 infection by other laboratory studies and postmortem examination, if necessary [4,5].

The last point, although their patient's varicella zoster virus (VZV) and herpes simplex virus (HSV) PCR tests were negative why they treated SARS-CoV-2 infection with acyclovir on a five-day course, instead of favipiravir/other antivirals?

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

[1] Theophanous C, Santoro JD, Itani R. Bell's palsy in a pediatric patient with hyper IgM syndrome and severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Brain Dev 2021;43(2):357–9.

[2] Zain S, Petropoulou K, Mirchia K, Hussien A, Mirchia K. COVID-19 as a rare cause of facial nerve neuritis in a pediatric patient. Radiol Case Rep 2021;16(6):1400–4.

[3] Egilmez OK, Gündoğan ME, Yılmaz MS, Güven M. Can COVID-19 cause peripheral facial nerve palsy? SN Compr Clin Med, 2021, in press. doi: 10.1007/s42399-021-00967-4.

[4] Finsterer J, Scorza FA, Scorza CA, Fiorini AC. Attributing increased prevalence of facial palsy to SARS-CoV-2 requires evidence. Brain Behav 2021;11(2):e01996.

[5] Mutlu A, Kalcioglu MT, Gunduz AY, Bakici B, Yilmaz U, Cag Y. Does the SARS-CoV-2 pandemic really increase the frequency of peripheral facial palsy?. Am J Otolaryngol 2021;42(5):103032.

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