

Review of: "Stellate ganglion block for anosmia and taste disturbance due to Long-COVID"

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Gaurav Chauhan presents a nicely written vignette on a case of long-Covid, with anosmia being treated with stellate ganglion block. The level of evidence is consequently low (level 4), and the novelty is moderate (as this clinical approach has been reported previously - but has been referenced by the author) - something the author can not be blamed for. On this basis, the case report should present some new insights into supposed mechanism and give a rationale why stellate ganglion block should be considered therapeutically meaningful.

However, the introduction lacks of focus, and should point straightforward into this rationale. Instead of presenting epidemiologic data on anosmia following SARS-CoV2-infections, the author should explain how infections might disturb the ANS, the mechanism this to the affect the olfactory system, and the role of the stellate ganglion for the upper body quarter. An article considered by heart is the the review on reflectory hyperinflammation by Lorenz Fischer ([10.1016/j.autneu.2021.102903](https://doi.org/10.1016/j.autneu.2021.102903)).

The vignette itself is brief, containing the smell related items only. I recommend a Table detailing other therapeutic attempts in their chronological order that have been previously made. Is there data on the viral load (PCR?). what kind of "antiviral" medication did she receive?

The discussion mainly deals with the complex interaction between Angiotensin-Converting Enzyme 2 receptor (ACE2) and COVID-19. However, there is no rationale, how stellate ganglion block should interact in this mechanism. Same as cerebral blood flow. This has nothing to do with your case. In summary, this is the weakest part of this presentation as it is not related at all to your clinical situation. Better focus on clinical findings. What else may have indicated sympathetic regulation following the block? What is similar / different to the other reports on smell and stellate block ([10-12])? etc.