Letter to the Editor

In Response to The Challenges of Pharmacotherapy of SARS-CoV-2 Infection in Patients with Sudden Sensorineural Hearing Loss Due to COVID-19

In Reply:

We would like to thank Narozny et al. for their interest in our publication "A narrative review of pharmacologic treatments for COVID-19: safety considerations and ototoxicity" and their insightful comments regarding the association between severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection and sudden sensorineural hearing loss (SSNHL).^{1,2} We agree with the authors that any COVID-19 patients experiencing SSNHL should be considered high-risk and receive urgent audiologic evaluation.

The growing body of literature regarding the incidence of SSNHL in COVID-19 patients, whether it be through exposure to ototoxic agents or due to SARS-CoV-2 infection itself, highlights the importance for all members of a patient's care team to maintain vigilance regarding the symptoms of SSNHL. Quick recognition and diagnosis of SSNHL, regardless of exposure to ototoxic agents, may be critical to recovery of audiologic function, audio-vestibular sequelae and improve quality of life.3 Studies have demonstrated that early treatment of hearing loss with corticosteroids results in significantly higher rates of complete hearing recovery than control groups without intervention.^{3,4} Current guidelines emphasize the importance of initiating treatment for hearing loss within 7 days of symptom onset.³

Our understanding of the immediate and long-term consequences of SARS-CoV-2 infection is constantly evolving. A recent study found evidence of decreased transient evoked otoacoustic emissions amplitudes and significantly lowered high-frequency pure tone audiometry thresholds among asymptomatic patients with PCRconfirmed SARS-CoV-2 infection, suggesting evidence of cochlear damage even in minor cases of COVID-19.5

While evidence regarding the long-term impact of COVID-19 on audiovestibular function is still being compiled, it is imperative for all healthcare providers to remain aware of the potential for audiologic dysfunction in COVID-19 patients and refer for prompt audiologic evaluation. Persistent vigilance on audiovestibular symptoms is needed as we embark on the exciting- and imperative -period of mass vaccination.

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