
Letter to the Editor

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

Dear Editor:

We read with colossal interest the manuscript of Little et al. entitled “A narrative review of pharmacologic treatments for COVID-19: safety considerations and ototoxicity.”¹ The authors concluded that among those infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), high-risk patient groups treated with ototoxic drugs should be given special attention, such as the elderly and hearing impaired. We agree with the authors of the publication. However, we would like to pay attention to the pharmacotherapy SARS-CoV-2 infection in patients with sudden sensorineural hearing loss (SSNHL) due to coronavirus disease 2019 (COVID-19). The authors omitted this group of patients in their work.


SSNHL was defined as a hearing loss of at least 30 dB in at least three consecutive frequencies that develop within up to 3 days. It is a relatively common pathology in otolaryngology, with a worldwide incidence of 5 to 20 cases per 100,000 people per year. Data accumulated suggest a possible relationship between SSNHL and SARS-CoV-2 infection. We reviewed the available literature finding, eight well-documented clinical cases of patients infected with SARS-CoV-2 with SSNHL due to COVID-19.^{2–9}


In five patients, the hearing loss co-occurred or within 30 days from the infection with SARS-CoV-2.^{2–6} These patients were in good general condition and were not receiving any medications at that time. When reporting the hearing loss, four patients were treated with standard SSNHL (steroid therapy in various ways).^{3–6} The patient described by Kilić et al. received oral hydroxychloroquine 200 mg twice daily for 5 days.²

In three patients, hearing impairment was bilateral (two patients), and unilateral (one patient) was reported after completing intensive treatment of severe forms of SARS-CoV-2 infections conducted in Intensive Care Units.^{7–9} The available data show that two patients were given azithromycin,^{7,8} one was furosemide,⁷ and two patients were given antivirals (oseltamivir, remdesivir).^{8,9}

We believe that hospitals and physician’s offices should consider the inclusion of audiology monitoring protocols for patients receiving ototoxic COVID-19 therapy. Patients with SSNHL due to COVID-19 should be provided with comprehensive audiological care.

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