central processes, including cerebrovascular injury and demyelinating disorders, is needed to further elucidate this possible interaction.

We found several factors helpful for accurate vestibular assessment. First, close communication between the audiology expert (L.P.) and the neurotology expert (J.D.S.) was essential. Second, high-speed video is readily available on many smartphones, and can extend the diagnostic accuracy of CHIT. Third, a default window of 300 ms for vHIT analysis may be too short in some cases. In patients with clinically suspect CHIT findings but normal vHIT findings, further examination with an extended window is warranted, and high-speed video can help clarify eye movements by allowing for slow motion replay.

Emily C. Wong, MD
Lauren Pasquesi, AuD
Kristen K. Steenerson, MD
Jeffrey D. Sharon, MD

Author Affiliations: University of California, San Francisco, San Francisco (Wong, Pasquesi, Sharon); Stanford University, Stanford, California (Steenerson).

Corresponding Author: Jeffrey D. Sharon, MD, 2330 Post St, San Francisco, CA 94115 (Jeffrey.sharon@ucsf.edu).

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COMMENT & RESPONSE

Nasal Saline Irrigations in the COVID-19 Pandemic

To the Editor We read with great interest the article by Farrell et al arguing for benefits of nasal irrigations during the coronavirus disease 2019 (COVID-19) pandemic.1 We totally agree that the benefit-risk equation is in favor of continuing nasal irrigations, particularly in patients with chronic rhinosinusitis, if respecting specific measures avoiding the risk of spreading the virus. Whereas the antiviral action of sodium chloride has already been established, the question is, to date, which additive could be useful and effective, especially regarding severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The use of povidone-iodine carries risk of dilution error, which may cause damage to ciliary function in the case of prolonged or repeated contact, because ready-for-use solutions are not available worldwide.1

However, other additives could be of interest. The biocidal activity of copper has been tested, highlighting its great antiviral activity by inactivating many viruses.2 Importantly, copper has shown the highest antiviral efficiency against SARS-CoV-2 compared with other environmental conditions.3 Copper-enhanced nasal solutions are routinely available and respect nasal epithelium tissue integrity, enhance barrier function, and improve mucociliary clearance and decongestion activity.4 These data suggest copper as a safe and efficient agent against coronavirus. We urge in vivo prospective studies involving nasal irrigations enriched with copper.

Other additives such as carrageenans or β-cyclodextrins combined with flavonoid agents should be explored as potential additives for nasal irrigations.5 Indeed, they have shown interesting properties against viruses without toxic effects.

To date, no treatment has clearly demonstrated its superiority in the treatment of the COVID-19 disease. Enriched nasal irrigations with copper should be seriously taken into consideration and may help to decrease virus spreading to a patient’s lower airway or immediate entourage.

Thomas Radulesco, MD, PhD, MS
Jerome R. Lechien, MD, PhD, MS
Justin Michel, MD, PhD, MS

Author Affiliations: Department of Oto-Rhino-Laryngology Head and Neck Surgery, Aix Marseille Univ, APHM, IUSTI, La Conception University Hospital, Marseille, France (Radulesco, Michel); School of Medicine, Department of Otolaryngology-Head & Neck Surgery, Foch Hospital, UFR Simone Veil, Université Versailles Saint-Quentin-en-Yvelines (Paris Saclay University), Paris, France (Lechien).

Corresponding Author: Thomas Radulesco, MD, PhD, MS, Department of Oto-Rhino-Laryngology and Head and Neck Surgery, La Conception University Hospital, 147 Bd Baille, 13005 Marseille, France (thomas.radulesco@ap-hm.fr).


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In Reply We thank Radulesco et al for their interest in our article and their letter in response. We agree that it would be beneficial to explore the utility of other topical additives in prevention and treatment of respiratory viruses, such as severe acute respiratory syndrome coronavirus 2. Regarding the potential use of copper, it is certainly encouraging to note its antiviral efficacy. The literature is particularly supportive of its use as an antimicrobial coating for surfaces. However, there is not yet strong evidence regarding the safety of copper as an additive for nasal saline irrigations. As the authors address, 1 preliminary study performed by Huang et al does note the safety of a nasal solution enriched with copper, among other additives. However, the product evaluated in that study reports only that it is enriched with copper and does not further specify the concentration or form of copper used. Though the aforementioned study notes safety of a nasal solution enriched with copper, animal studies of nasally applied copper salts and nanoparticles have demonstrated the potential toxic effects of copper, resulting in direct olfactory neuron damage or intracranial translocation, resulting in neurologic damage. These concerns were further described in a recent review of copper toxicology, which notes concern for copper-induced cell damage through the release of reactive oxygen species.

We appreciate the alternative suggestion and believe that, though the data are not strong enough to support safety at this time, the utility of copper nasal irrigations does warrant further safety and efficacy analysis.

Nysa Fox Farrell, MD
Cristine Klatt-Cromwell, MD
John Schneider, MD

Author Affiliations: Department of Otolaryngology–Head and Neck Surgery, Washington University in St Louis, St Louis, Missouri.

Corresponding Author: Nysa Fox Farrell, MD, Washington University School of Medicine in St Louis, 660 S Euclid Ave, Campus Box 8115, St Louis, MO 63110 (nysafarrell@wustl.edu).


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Moving Toward Equitable Telemedicine in Otolaryngology–Head and Neck Surgery

To the Editor We appreciate Miller et al for detailing the use and trends of telemedicine services provided to Medicare beneficiaries. In this study, they determine that from 2010 to 2018, there was little absolute growth of telemedicine services in Otolaryngology–Head and Neck Surgery (OHNS), particularly in comparison to specialties like dermatology and psychiatry. We concur with the authors’ call for telemedicine adoption, but we wish to highlight the potential effect of telemedicine on marginalized groups, including racial and cultural minorities, rural communities, and low-income populations.

These communities continue to experience several health disparities that persist in OHNS. In a recent study, public insurance, non–White race, and a low socioeconomic status all correlated with delayed acquisition of pediatric hearing aids following failed newborn hearing screens. Moreover, a study of cochlear implant recipients revealed that only 10% of children in rural areas had access to speech therapy services at diagnosis and experienced higher rates of cochlear implant complications. Populations from disadvantaged backgrounds may lack the social support, means of transport, and financial stability for multiple appointments, which can lead to delays in diagnosis and loss to follow-up.

Telemedicine shows promise in bridging this gap. Smaller studies have already demonstrated this potential, underscoring telemedicine’s strengths of reduced financial burden on patients, saved time, and expanded access for patients who live far from otolaryngologists. However, the fundamental question remains whether telemedicine can be accessed by the very people it aims to help. Telemedicine necessitates the possession of basic technological equipment for telemedicine, such as a webcam and internet, while also requiring a degree of technical knowledge and literacy. As institutions and practices move toward virtual visits, especially in the times of coronavirus disease 2019, we must not leave vulnerable populations behind.

A study of telemedicine use among a predominantly Hispanic and Spanish-speaking population in Rio Grande Valley, Texas revealed that these populations used telemedicine services at a disproportionately lower rate. Expanding on this call for the uptake of telemedicine in OHNS, we encourage researchers and clinicians to critically analyze the usage patterns of telemedicine among varied geographic, racial, ethnic, and non–English speaking populations. By doing so, we will identify barriers and find answers to creating an equitable and effective model of telemedicine for OHNS.

Joseph Kidane, BS
Eric K. Kim, BA
Jeffrey D. Sharon, MD

Author Affiliations: University of California School of Medicine, San Francisco (Kidane, Kim); Department of Otolaryngology–Head and Neck Surgery, University of California, San Francisco (Sharon).

Corresponding Author: Jeffrey D. Sharon, MD, Department of Otolaryngology–Head and Neck Surgery, University of California, San Francisco, 2340 Sutter St, San Francisco, CA 94115 (Jeffrey.sharon@ucsf.edu).