## Letter to the Editor

## In Response to COVID-19 and the Otolaryngologist: Preliminary Evidence-Based Review

In Reply:

In their commentary, Drs. Lovato and de Filippis correctly point out the importance of changes in smell and taste in patients with COVID-19 infection. Early in the epidemic, reports of olfactory dysfunction were anecdotal. Since our review was first published, additional research has emerged on the smell and taste changes associated with COVID-19. Vaira et al., writing in The Laryngoscope, reported that based on history in a series of 320 patients, 19.4% had chemosensory dysfunction.<sup>1</sup> Yan et al. performed a crosssectional study in which 68% of COVID-19-positive patients reported olfactory changes.<sup>2</sup> Providing further objective evidence, Moein et al. administered the University of Pennsylvania Smell Identification Test (UPSIT) to 60 COVID-19positive patients and 60 age- and sex-matched controls, and found that 98% of patients had some smell dysfunction by UPSIT score, with 58% scoring in either the anosmic or severely hyposmic range.<sup>3</sup> Underscoring the prevalence of smell dysfunction, this symptom has been added to multiple national health organizations' lists of symptoms suspicious for COVID-19 infection. Furthermore, important initiatives to collect additional data on anosmia have begun such as the American Academy of Otolaryngology-Head and Neck Surgery COVID-19 Anosmia Reporting Tool.

There is not yet published data on the recovery rate of patients with COVID-19 infection, but if even a small percentage of patients are left with long-term anosmia, the population-wide impact could be significant. A recent article titled "A Primer on Viral-Associated Olfactory Loss in the Era of COVID-19" provides several recommendations based on prior evidence and expert opinion.<sup>4</sup> In particular, given the limited evidence of benefit and the reports of some harm associated with systemic steroid use, much caution should be exercised before considering systemic steroids for this specific indication, with more data to be published soon on this issue.

Future key areas of research will include 1) identifying risk factors for developing post-COVID olfactory dysfunction, 2) determining the recovery course of post-COVID olfactory dysfunction, and 3) identification of potential treatment strategies and their efficacy.

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