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Editorial

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Coronavirus disease 2019: olfactory and gustatory function, negative impact of personal protective equipment on communication, and an antigen testing complication

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Following growing anecdotal evidence suggesting an increasing incidence of cases of anosmia during the current pandemic, on 18th May the UK government added anosmia and ageusia to the list of symptoms of coronavirus infection.^{1,2} There is now considerable evidence that a new onset of altered sense of smell or taste is related to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection.³

An objective evaluation of olfactory and gustatory function in the first days of infection is almost impossible, as affected individuals are generally in home quarantine. In this month's issue of *The Journal of Laryngology & Otology*, Petrocelli *et al.* utilise a recently validated self-administered psychophysical test, which can be performed remotely in the assessment of early-stage coronavirus disease 2019 (Covid-19) patients. While there have now been many publications describing self-reported anosmia in Covid-19, the development and validation of a home assessment test to define psychophysical thresholds has been something olfactologists have unsuccessfully aimed to achieve for many years, and the authors are to be congratulated for having utilised these tests in 300 patients. In their study, 70 per cent of patients presented with an olfactory and/or gustatory disturbance, 47 per cent with complete anosmia and 38 per cent with ageusia. **

In a study by Hampton *et al.*, healthcare workers were assessed for their ability to interpret speech with and without personal protective equipment (PPE).⁵ A significant difference in speech discrimination scores was found between normal and PPE wearing subjects in operating theatre simulated background noise levels (70 dB). The authors concluded that wearing PPE can impact communication in healthcare environments. This has necessitated novel adaptations to overcome communication barriers while wearing PPE (e.g. hearing technologies and high-technology electronic devices).^{6,7} In an attempt to minimise surgical error through miscommunication, Wilkinson *et al.* sought to introduce a simple sign language system that could be used as an adjunct during surgical tracheostomies.⁸

Finally, a manuscript by Mughal *et al.* draws attention to a complication of viral swab nasopharyngeal antigen testing, describing the premature engagement of a viral swab breakpoint, resulting in a retained swab in the nasal cavity that required retrieval.⁹

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