Letter to the editor

Loss of sense of smell and taste - screening for SARS-CoV-2 infection in healthcare personnel

Matt Lechner[1,2], Zara M. Patel[3], Carl Philpott[4,5] & Valerie J. Lund[6]

[1] Whipps Cross University Hospital, Barts Health NHS Trust, UK
[2] UCL Cancer Institute, University College London, London, UK
[3] Department of Otolaryngology-Head and Neck Surgery, Stanford University, Palo Alto, CA, US.
[4] ENT Department, James Paget University Hospital NHS Foundation Trust, Gorleston, UK.
[5] Norwich Medical School, University of East Anglia, Norwich, UK
[6] Royal National Throat, Nose and Ear Hospital, UCLH Foundation Trust, London, UK

We read the recent articles by Elizier et al.[1] in *JAMA Otolaryngology-Head and Neck Surgery* and Mao et. al.[2] in *JAMA Neurology*, respectively, with great interest. Elizier et al. describe the highly interesting case of a woman in her 40s who presents with an olfactory loss secondary to SARS-CoV-2 infection and Mao et al. describe neurological manifestations of hospitalized patients with SARS-Cov-2 infection in China. They found that around 5% experience a loss of their sense of smell and taste. As the Covid-19 pandemic is hitting both the US and Europe hard at the moment, symptoms of anosmia and ageusia, even in the absence of the other common symptoms of SARS-CoV-2 infection need to be added to the list of primary screening symptoms for SARS-CoV-2 infection and should indicate the need for urgent Covid-19 testing and self-isolation. The CDC has just added this to the symptoms related to Covid-19, but individual institutions may or may not be testing based on this symptom[3]. In our clinics in the UK, a number of health care personnel at the forefront of patient care during the Covid-19 pandemic have presented with loss of smell and taste. Upon testing, they were found positive for SARS-CoV-2 infection by qPCR-based swab testing. The debate is ongoing to what extent the loss of smell and taste in SARS-

CoV-2 infection is caused by nasal congestion and edema in the upper portion of the nasal cavity or whether and how it is mediated by direct damage to olfactory neuroepithelial cells as a result of the infection. Experience by colleagues suggests that nasal SARS-CoV-2 infection does not appear to exhibit significant nasal congestion or a runny nose[4] and also favors a neurotropic and neuroinvasive pathogenesis which may be site-specific to the olfactory system as has been shown for other coronaviruses previously[4], however, the short time to recovery exhibited in some of these patients leaves the etiology unclear.

In conclusion, hyposmia and hypogeusia need to be added to the list of primary screening symptoms for SARS-CoV-2 infection in all countries and should indicate the need for urgent Covid-19 testing and self-isolation. Awareness and early recognition of these symptoms is particularly important for health care personnel at the forefront of patient care during the Covid-19 pandemic.

(373 words)

References:

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