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Anosmia and Ageusia: Common Findings in COVID-19 Patients

Luigi A. Vaira, MD; Giovanni Salzano, MD; Giovanna Deiana, MD; Giacomo De Riu, MD, FEBOMFS

In a not negligible number of patients affected by COVID-19 (coronavirus disease 2019), especially if paucisymptomatic, anosmia and ageusia can represent the first or only symptomatology present.

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RAPID COMMUNICATION

Europe and America currently represent the new front where the battle against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is being fought. In the management of the health crisis, the identification of paucisymptomatic patients is emerging as a crucial factor in order to interrupt the transmission chain of the virus. In the centers that are facing this emergency, a significant number of patients presenting anosmia and ageusia associated with fever (> 37.5°C) as onset symptoms are being detected. This minor and nonspecific symptomatology can represent the only manifestation of the disease.

Mao et al.[1] analyzed the frequency of neurological manifestations in 214 patients with coronavirus disease 2019 (COVID-19), identifying anosmia in 11 (5.1%) patients and ageusia in 12 (5.6%) patients. There are no other studies in the literature regarding neurological symptoms in patients with COVID-19.

Unfortunately, the actual emergency situation does not allow us to provide a precise incidence of the manifestation, but our estimates from history and physical examination of the first 320 patients for whom we have data indicate that chemosensory dysfunction is present in 19.4%. This incidence can be underestimated because the gustatory and olfactory function is not always investigated.

Anosmia has already been reported in the course of SARS[2] and other coronavirus[3,4] infections; however, it represents a rare occurrence. Interestingly, in COVID-19 patients ageusia and anosmia are not accompanied by nasal obstruction or other rhinitis symptoms. Therefore, this is probably due to the direct damage of the virus on the olfactory and gustatory receptors.[5] Currently, it is not possible to determine whether there will be a full recovery of the olfactory and gustatory functions or how long it will take.

However, on the basis of the experience that is being acquired in Italy, we believe it is important to inform otolaryngologists colleagues to pay attention to these possible manifestations of SARS-CoV-2 infection. In a non-negligible number of patients, especially if paucisymptomatic, ageusia and anosmia can represent the first or the only symptomatology manifestation. It will be important, when feasible, to obtain olfactory and gustatory testing data on patients with confirmed COVID-19 testing to provide quantitative data on the incidence and severity of these sensory losses. Finally, understanding mechanisms of sensorineural olfactory loss with coronavirus infections might provide novel insights into aspects of viral pathogenesis.

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From the Maxillofacial Surgery Unit (L.A.V., G.D.R.), University Hospital of Sassari, Sassari, Italy; Department of Medical, Surgical and Experimental Sciences (G.D.), University of Sassari, Sassari, Italy; and the Maxillofacial Surgery Unit (G.S.), University Hospital of Naples "Federico II", Naples, Italy.

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Send correspondence to Luigi A. Vaira, Viale San Pietro 43/B, 07100 Sassari, Italy. E-mail: luigi.vaira@gmail.com

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