



ANOSMIA AND HYPOSMIA IN COVID-19 INFECTION

ČULINA Ž.¹, Skitarelić N.^{2,4}, Čulina D.⁶, Skitarelić N.^{3,4,5}

¹ Zadar General Hospital, Zadar, Croatia
Department of pulmonology

² Zadar General Hospital, Zadar, Croatia
Department of pediatrics

³ Zadar General Hospital, Zadar, Croatia
Department of otolaryngology

⁴ University of Zadar, Zadar, Croatia
Department of Health Studies

⁵ University of Rijeka, Rijeka, Croatia
School of Medicine

⁶ UHC Zagreb, Zagreb, Croatia
Clinic for lung diseases Jordanovac

Objective:

At the end of 2019 in Wuhan, China, a novel coronavirus, Severe Acute Respiratory Syndrome Corona virus 2 (SARS-CoV-2), was considered the cause of some lower respiratory tract infections. On February 11, 2020, the new disease caused by the SARS-CoV-2 virus was officially termed "COVID 19" by WHO. Transmission from person to person occurs mainly by direct contact or droplets spread



by coughing or sneezing by an infected individual with SARS-CoV-2.

The most common symptoms are fever, cough, fatigue, headache, dyspnea, and anosmia/hyposmia. In the most severe cases, patients may develop pneumonia, acute respiratory failure, distress syndrome, and acute heart problems.

The most possible mechanisms of olfactory disorders in SARS-CoV-2 infection are: suppression of the olfactory bulb with penetration of the virus, mucosa edema of the olfactory bulb, and damage of the sustentacular cells in the olfactory epithelium. Damage to sustentacular cells and Bowman cells directly affects the perception of odors, not by the transmission of the virus to olfactory receptor neurons but by impairing some of its functions that are necessary for the functional metabolism of these neurons. Mature olfactory neurons do not express ACE 2 receptors, and therefore are not likely to be infected by SARS-CoV-2. Damage to sustentacular cells is the most important mechanism of olfactory damage in Covid-19 infection. In most patients with olfactory disturbances after fourteen days, the epithelium showed signs of recovery.'

Key words: SARS-CoV-2 infection, olfaction disorders, smell



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