

Oral symptoms and lesions in SARS-CoV-2 positive patient

Running title: Oral manifestations of SARS-CoV-2 infection

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Professor Giovanni Lodi, DDS, PhD

Editor-in-Chief, Oral Diseases

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Dear Editor-in-Chief Professor Lodi,

we would like to contribute to the oral manifestations of SARS-CoV-2 infection due to the small number of case reports described and confusing data from the available literature. Previous data from the literature describe heterogeneous signs and symptoms on the oral mucosa: dysgeusia or ageusia, desquamative gingivitis, erythema exudativum multiforme (EEM), salivary gland infections, xerostomia, necrotizing periodontal disease (NPD), nonspecific erythematous lesions, recurrent herpes simplex virus (HSV) infection, vesiculobullous lesions (Martín Carreras - Presas et al., 2020; Galván Casas et al., 2020; Jimenez-Cauhe et al., 2020; Sinadinis et al., 2020; Patel et al., 2020; Petrescu et al., 2020; Al-Khatib, 2020; Passarelli et al., 2020; Abu-Hammad et al., 2020; Chaux-Bodard et al., 2020). Such results should be interpreted with caution so as not to create unnecessary concern among physicians, dentists, and patients. A short communication by Martín Carreras - Presas et al., 2020 described oral lesions in patients with suspected SARS-CoV-2 infection, so it is not possible to draw conclusions about a causal relationship. To date, acute ageusia is the most significant symptom in the oral cavity that can raise suspicion of early SARS-CoV-2 infection.

We would like to present oral manifestations in 40-year-old dental assistant with confirmed SARS-CoV-2 infection by polymerase chain reaction (PCR). She was suspected of SARS-CoV-2 infection due to initial symptoms of general weakness, mild fever (37.2°C), and acute loss of taste sensation. Despite the relatively mild symptoms, she was referred for testing (PCR) at the Clinical Hospital Center Split due to the nature of her work. She had no associated comorbidities and was not taking any medications. The patient only reported frequent eruptions of recurrent *herpes labialis* (RHL). She felt pain and burning in the oral cavity seven days after the confirmation of SARS-CoV-2 infection. An oral medicine specialist was telemedically consulted. Clinical oral examination was performed through video consultation and attached photographs. Clinical oral findings showed recurrent HSV of the hard palate (Figure 1), white hairy tongue (*lingua villosa alba*), and nonspecific white lesions of the ventral side of the tongue. The patient was prescribed systemic acyclovir therapy (Virolex® tbl 200 mg, five times a day for five days) and local therapy (antiseptic, nystatin, panthenol, local anesthetic) for two weeks. The therapy was delivered to her home address in compliance with disinfection measures. The patient's recovery lasted three weeks, and the healing was confirmed by a double negative PCR test.

We are of the opinion that the acute loss of taste in our patient is caused by the new coronavirus. Lesions of recurrent HSV of the hard palate mucosa are not caused, but triggered by SARS-CoV-2 infection. Recurrent oral HSV infection is likely to be stress-induced and is a secondary manifestation of the host's compromised immune system.

Clinical oral examination should be a standard part of the protocol of hospitalized patients with confirmed SARS-CoV-2 infection. Further studies are needed to determine whether the new coronavirus is the cause or predisposing factor for the development of oral symptoms and lesions.

I look forward to hearing from you at your earlier convenience.

Yours sincerely,

Ana Glavina

### CONFLICTS OF INTEREST

Authors declare they have no conflict of interest.

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**FIGURE 1** Recurrent HSV of the hard palate