

Oral manifestations accompanying and related to COVID-19: Overlooking the obvious

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I have followed with great interest diverse publications related to mucocutaneous manifestations occurring in individuals infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and coronavirus disease (COVID-19). From our historical findings, when a new disease emerges (such as HIV/AIDS, discovered almost four decades ago) (Septowickz, 2001), the amount of information released is usually inversely proportional to the time required to analyse the new disease.

A long-standing journalism practice lies on the premise “publish first, verify later,” a situation that occasionally occurs in times of crisis, such as the experienced at the beginning of the SARS-CoV-2 pandemic. Hence, reviewers and editors have had a challenging year dealing with an unusual number of new publications. The closure of universities, laboratories, and research centres, with a consequent interruption of clinical attendance and teaching activities, led to the conception of new projects, completion of awaiting publications, and the submission of a substantial number of cases and case series on COVID-19 oral findings.

Dermatologists were the first to publish on mucocutaneous findings of COVID-19 (Jiménez-Cauhe et al., 2020; Galván Casas et al., 2020; Recalcati, 2020). They accurately showed that the skin findings were similar to cutaneous manifestations occurring during common viral diseases (Recalcati, 2020), and these lesions could equally be related to drug reactions in the context of desperate therapeutic management (Jiménez-Cauhe et al., 2020; Skroza et al., 2020). They also reported that in few cases, skin manifestations exhibited the hypercoagulative syndrome associated with severe COVID-19 (Galván-Casas et al., 2020).

An example of such a manifestation that clearly illustrates the discussion concerning the nature of an entity, is the pseudo-chilblain. While some studies considered these entities as skin manifestations

of COVID-19, an early study (Galvan-Casas et al., 2020) described their appearance as consistent with lesions commonly seen in viral exanthema. There are multiple postulated pathophysiologic mechanisms of pseudo-chilblains, including the weather and physical activity during quarantine, immune stimulation and genetic polymorphisms (Tan et al., 2021). The controversy persists, and its association with COVID-19 is far from being confirmed (Piccolo et al., 2020; Vázquez-Osorio et al., 2021). There is consensus on the need not to overreact if encountered and avoid alarming states that could overwhelm hospitals and care centres.

Unfortunately, reports on oral manifestations and COVID-19 have taken diverse routes. The first case series on oral manifestations (Nuno-González et al., 2020) reported various normal and common benign entities (crenate tongue, benign migratory glossitis) and inflammatory conditions (lingual papillitis, aphthous stomatitis and patchy depapillation). After rapidly clarifying the initial ambiguity (Al-Khatib, 2020; Ponce & Tjioe, 2020), the misunderstanding persisted to what is being circulated today as a “COVID tongue,” an inexistent entity that has generated doubts and fear in physicians, stomatologists and patients.

Recently, a wave of letters published, introduced us to COVID-19 cases presenting discrete oral erosive lesions, traumatic ulcers and herpes simplex virus-related oral lesions. With consternation, we saw how erythematous candidiasis and benign migratory glossitis cases were published in high-impact journals, suggested as being signs of COVID-19. Our journal was not exempted, with a publication of a series of 26 cases of tongue ulcers (Riad et al., 2020) as direct manifestations of SARS-CoV-2 infection. The unique image presented corresponds to a traumatic ulcer in an individual with feeble periodontal and dental health and clear evidence of cutting edges affecting the lateral side of the tongue.

Thus, it is imperative to be precise and cautious about our knowledge of oral manifestations of COVID-19. Currently, there is sufficient evidence confirming that most oral manifestations in patients with mild COVID-19 are common manifestations of viral infections. The report of a woman with multiple aphthae on the labial mucosa and acute rash in legs, initially attributed to COVID-19 and later confirmed as chikungunya fever, has called to remember that acute ulcers are a shared presentation by many conditions and that "in pandemic times, not everything is COVID-19" (Gueiros et al., 2020).

The increased susceptibility of COVID-19 patients to viral and fungal co-infections and the presence of reactive lesions (such as traumatic ulcers and recurrent aphthous stomatitis), result from a combination of an impaired immunity, the pharmacological management and the psychosocial burden of the pandemic (Martín Carreras-Presas et al., 2020; Pérez-Sayáns et al., 2021; Scully & Samaranayake, 2016). Like-minded to Tomo et al., (2020), although the high worldwide SARS-CoV-2 spread is high, oral manifestations in COVID-19 are uncommon, and may be considered a group of opportunistic secondary disorders without any pattern or predictable profile.

Finally, it is critical to mention the confirmation of oral lesions induced by vascular inflammation and hypercoagulable status present in COVID-19 patients with moderate and severe disease (Cruz Tapia et al., 2020; Soares et al., 2020; Soares et al., 2020). The demonstration of vasculitis, thrombi formation, vascular congestion and the immunohistochemical expression of angiotensin-converting enzyme-2 in vessels, in addition to the image of an oral ulcer with peripheral ischaemia, could be helpful to understand the nature of these infrequent lesions. However, it should be clarified that these oral manifestations do not enable us to identify patients in the early stages of SARS-CoV-2 infection, nor require a biopsy procedure for COVID-19 diagnosis.

Today, the world needs certainty, clarity and concise information to leave uncertainty and fear. Health professionals play a fundamental role in knowledge transmission, we analysed and interpreted scientific information, bringing it to our patients with clarity, truthfulness and efficacy.

CONFLICT OF INTEREST

None to declare.

AUTHOR CONTRIBUTIONS

Gabriela Anaya-Saavedra is the only author of this short communication.

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