

Can “COVID-19 tongue” be considered a pathognomonic finding in SARS-CoV-2 infection?

Dear Editor,

We read with great interest the manuscript published by Nuno-Gonzalez et al. (2021). It has had a great social impact in Spain and worldwide, due to the presumptive description of a “new clinical entity,” called “COVID-19 tongue.” In the context of a pandemic caused by a virus still little known, the attempt to identify clinical characteristics that may be linked to this virus infection is commendable. However, we must take these preliminary findings with great precaution. While cross-sectional studies cannot demonstrate cause and effect, it can provide a quick look at correlations that may exist at a particular point. But even this type of studies should not exempt from a statistical analysis. We could identify a “*p* value” in one paragraph, but the manuscript has no information about what test was used.

Some of the “oral findings” are very common in the overall population and hardly could be a manifestation of a specific disease (transient lingual papillitis, glossitis with lateral indentations, aphthous stomatitis, glossitis with patchy depapillation; Wiesenfeld et al., 2020). The exception is “mucositis” that, although it can be considered a generic term (inflammation of the mucosa), it has been used in the last years to address lesions related to chemotherapy and hematopoietic stem cell transplantation.

The main characteristics of the “covid-19 tongue” were as follows: (a) glossitis with lateral clefts, anterior “temporary” lingual papillitis due to swelling of the tongue and friction with the teeth, and (b) glossitis with patchy depapillation. In our opinion, these statements taking into account the type of study carried out, that is, clinical, cross-sectional, without follow-up and without pathological evaluation, imply a serious diagnostic bias. In other words, there is a lack of information prior to diagnosis and suffering from COVID-19 disease, since the crenate tongue is a non-pathological and anatomical variation of normality and sometimes associated with patients with anxiety or bruxism, in both cases very prevalent (Dafar et al., 2016; Meirelles & Cunha, 2016; Reamy et al., 2010). In relation to patchy depapillation, better known as geographic tongue or benign migratory glossitis, it is a very common entity considered by some authors almost as structural and certainly not associated with viral infections (Dafar et al., 2016; Reamy et al., 2010). Moreover, atrophies, erosions, ulcers, and blisters are common and proven manifestations in other viruses that can appear in situations of general illness or impaired immunity (Scully & Samaranayake, 2016). In any case, these nonspecific

manifestations, probably prior to the SARS-CoV-2 infection, should be verified by histopathological examination, so that we could accurately evaluate this possible new entity known as the “COVID-19 tongue.” In addition, during COVID-19 progress there are other factors to consider such as the use of drugs and xerostomia that may be more related to the onset of these lingual alterations than by the SARS-CoV-2 virus itself. We urge a careful evaluation of this possible entity to avoid diagnostic pitfalls and fruitless suspicions by patients and professionals with little experience in oral medicine.

CONFLICT OF INTEREST

None to declare.


AUTHOR CONTRIBUTIONS

M Perez-Sayans : Conceptualization; Formal analysis; Investigation; Methodology; Project administration; Supervision; Validation; Writing-original draft; Writing-review & editing. **Karem López Ortega**: Supervision; Writing-original draft; Writing-review & editing. **Paulo Henrique Braz-Silva**: Validation; Writing-original draft; Writing-review & editing. **Carmen Martín Carreras-Presas**: Conceptualization; Investigation; Writing-original draft; Writing-review & editing. **Andrés Blanco Carrión**: Conceptualization; Writing-original draft; Writing-review & editing.


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Mario Pérez-Sayans¹ 

Karem L. Ortega² 

Paulo Henrique Braz-Silva^{2,3} 

Carmen Martín Carreras-Presas⁴ 

Andrés Blanco Carrión¹

¹Oral Medicine, Oral Surgery and Implantology Unit (MedOralRes), Faculty of Medicine and Dentistry, Instituto de Investigación Sanitaria de Santiago (IDIS), Universidade de Santiago de Compostela, Santiago de Compostela, Spain

²Department of Stomatology, School of Dentistry, University of São Paulo, São Paulo, Brazil

³Laboratory of Virology, Institute of Tropical Medicine of São

Paulo, School of Medicine, University of São Paulo, São Paulo, Brazil

⁴Oral Medicine Unit, Faculty of Dentistry, European University of Madrid, Madrid, Spain

Correspondence

Carmen Martín Carreras-Presas, Oral Medicine Unit, Faculty of Dentistry, European University of Madrid, Calle Tajo, s/n, 28670 Villaviciosa de Odón, Madrid, Spain.
Email: carmen.martin2@universidadeuropea.es

ORCID

Mario Pérez-Sayáns  <https://orcid.org/0000-0003-2196-9868>

Karem L. Ortega  <https://orcid.org/0000-0002-9573-2858>

Paulo Henrique Braz-Silva  <https://orcid.org/0000-0002-1842-9521>

[org/0000-0002-1842-9521](https://orcid.org/0000-0002-1842-9521)

Carmen Martín Carreras-Presas  <https://orcid.org/0000-0002-0937-0994>

[org/0000-0002-0937-0994](https://orcid.org/0000-0002-0937-0994)

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