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SARS COV-2 LOAD IN PERIODONTAL DISEASE

I read with interest the November JADA article entitled "Estimating Salivary Carriage of Severe Acute Respiratory Syndrome Coronavirus 2 in Nonsymptomatic People and Efficacy of Mouthrinse in Reducing Viral Load: A Randomized Controlled Trial" (Chaudhary PP, Melkonyan A, Meethil A, et al. *JADA*. 152[11]:903-908). The authors indeed provide important information regarding the utility of commonly available mouthrinses in reducing salivary loads of severe acute respiratory syndrome coronavirus 2 (SARS CoV-2) to reduce the possibility of infection transfer.

It would be worth mentioning that saliva is not just saliva itself but can have in it gingival crevicular fluid (GCF) as well, along with sputum or other expectorate. The authors did note the possibility of patients with episodes of cough exhibiting greater viral load.

SARS CoV-2 has not only been detected in GCF, but these levels have been found to be correlated with viral recovery from saliva and nasopharyngeal swab sampling.¹ In fact, the sensitivity of GCF (63.64%) to detect SARS CoV-2 has been found to be comparable to that of saliva (64.52%).¹

Not only this, but SARS CoV-2 has been detected in plaque and calculus samples.^{2,3} There is also evidence in literature to support the relationship between periodontal disease and worse COVID-19 related outcomes.⁴

In light of this knowledge, it would then seem logical to argue that periodontal disease might not only affect COVID-19-related adverse outcomes but could influence the cumulative viral load of the oral cavity by virtue of greater plaque accumulation, calculus formation, and GCF flow, all of which have been shown to harbor the SARS CoV-2. ■

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1. Gupta S, Mohindra R, Chauhan PK, et al. SARS-CoV-2 detection in gingival crevicular fluid. *J Dent Res*. 2021;100(2):187-193. <https://doi.org/10.1177/0022034520970536>
2. Gomes SC, Fachin S, da Fonseca JG, et al. Dental biofilm of symptomatic COVID-19 patients harbours SARS-CoV-2. *J Clin Periodontol*. 2021;48(7):880-885. <https://doi.org/10.1111/jcpe.13471>
3. Berton F, Rupel K, Florian F, Biasotto M, Pallavicini A, Di Lenarda R. Dental calculus: a reservoir for detection of past SARS-CoV-2 infection. *Clin Oral Investig*. 2021; 25(8):5113-5114. <https://doi.org/10.1007/s00784-021-04001-8>
4. Gupta S, Mohindra R, Singla M, et al. The clinical association between periodontitis and COVID-19. *Clin Oral Investig*. Published online August 27, 2021. <https://doi.org/10.1007/s00784-021-04111-3>

AUTHORS' RESPONSE

We thank Dr. Sahni for his letter to the editor commending our manuscript. As he points out, emergent evidence links periodontal disease to COVID-19 incidence and severity, and various oral niches are emerging as potential reservoirs for the SARS-CoV2 virus. These lines of evidence highlight the role of the dental professional in preventing community spread of infectious diseases. They also reinforce the importance of at-source mitigation and elimination through mouthrinsing, high-volume evacuation, and so forth, and eliminating viral reservoirs through oral hygiene, professionally administered oral prophylaxis, and other means. ■

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