LETTER TO THE EDITOR

ORAL DISEASES | WILEY

Lessening COVID-19 healthcare burden in dental practice via rapid serological tests

Dear Editor,

It is known that dental surgeons play an important role with regard to oral cancer awareness, early diagnosis, and control, especially taking into account that oral medicine specialists have a very meticulous vision of discrete lesions that might represent potentially malignant disorders of the oral cavity (Abadeh, Ali, Bradley, & Magalhaes, 2019). Any loss of their activity in a COVID-19 lockdown scenario will worsen care for such a high-risk group of patients. Perhaps dentists, with all healthcare staff, can play a new role to lessen COVID-19 healthcare burden.

In low- and middle-income countries, like Brazil, rare diseases such as mucosal melanomas are diagnosed in advanced stages in a similar manner as high-income countries (Cohen Goldemberg, de Melo, de Melo Pino, & Thuler, 2020). Nevertheless, tongue malignancy, the most common location of oral cancer, still presents as a low-income country disease, being usually first detected in advanced stages in socioeconomically disadvantaged groups (Cohen Goldemberg, de Araújo, Antunes, de Melo, & Santos Thuler, 2018). It is likely that this situation will be further compounded by the SARS-CoV-2 pandemic. There will be less opportunity for such individuals to seek professional help as they may be at particular risk of virus acquisition, by having to shield themselves or others and/or oncological services will have lessened greatly in view of the need for clinicians to help with the management of patients infected with SARS-CoV-2 (Meng, Hua, & Bian, 2020). In addition, patients already receiving immunosuppressive therapies for a number of cancers run the risk of acquisition of SARS-CoV-2 and/or having an advancing of their cancers if therapy is unable to be maintained (Gosain et al., 2020). Lessening the likely spread of SARS-CoV-2 might, however, all be it, only slight, reduce the likelihood of such a scenario.

In our view, dentists and other oral healthcare providers have a pivotal role in helping the massive and necessary testing for SARS-CoV-2 in the clinical practice. This could be a game changer in order to minimize the chances of a second wave of the disease with catastrophic consequences resembling what happened in the early twentieth century, during the "Spanish" influenza pandemic. It is now clear that countries that managed to have a higher test capacity of patients for COVID-19, including the Republic of Korea, Germany, and New Zealand, managed to minimize the lockdown enforcement measures and the collapse of their healthcare system. Considering Brazil is an upper-middle-income country with severe diseases presenting as those of low-income countries (Cohen Goldemberg et al., 2018), it is hard to imagine the impact of lack of testing, but indeed, it could be catastrophic, particularly in lower-income countries. Infection control measures in the dental practice include not only PPEs, constant environmental disinfection, and safety admission strategies but an additional anamnesis step which includes questions related to the risk of presenting the novel coronavirus, including contact with known carriers of the disease (Odeh et al., 2020).

Dentists, together with medical doctors, may help with the widespread use of rapid serological tests for every patient they see at their practices to investigate their serological status (Hoffman et al., 2020), especially now that it is known that cross-immunity could be conferred by different common cold coronaviruses (Grifoni et al., 2020). This is obviously no immunity passport, but has the potential to help determine what patients do require the more complex RT-PCR for SARS-CoV-2.

This strategy could improve the efficiency of identifying infectious individuals, reduce costs, and help provide a picture of the highly underreported incidence of the novel coronavirus (Lau et al., 2020)—particularly in countries where serological and virological testing of large communities is challenging. Asymptomatic carriers seem to facilitate the rapid dissemination of SARS-CoV-2 and in turn generate large numbers of patients who run the risk of severe disease that require complex and expensive care (Li, Pei, & Chen, 2020). In a short space of time, while there have been strong hints that agents such as dexamethasone or remdesivir may lessen the progression of disease, there is no evidence that a vaccine for SARS-CoV-2 will be available in the near future. Thus, now is the time to instigate policies that will maximize the identification of infected and protected individuals. It might not help with the present pandemic—but could make a difference if a second global outbreak becomes suspected. Lessening the presence of SARS-CoV-2 helps everyone and would be perhaps especially important for these patients with, or at risk of, cancer.

KEYWORDS

cancer, COVID-19, dentistry, oral medicine, serology

CONFLICTS OF INTEREST

All authors declare there is no conflict of interest related to the present letter.

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REFERENCES

Abadeh, A., Ali, A. A., Bradley, G., & Magalhaes, M. A. (2019). Increase in detection of oral cancer and precursor lesions by dentists: Evidence from an oral and maxillofacial pathology service. *Journal of the American Dental Association, 150,* 531–539.

Cohen Goldemberg, D., de Araújo, L. H. L., Antunes, H. S., de Melo, A. C., & Santos Thuler, L. C. (2018). Tongue cancer epidemiology in Brazil: Incidence, morbidity and mortality. *Head and Neck, 40,* 1834–1844. https://doi.org/10.1002/hed.25166

Cohen Goldemberg, D., de Melo, A. C., de Melo Pino, L. C., & Thuler, L. C. S. (2020). Epidemiological profile of mucosal melanoma in Brazil. *Scientific Reports, 10,* 1–7.

Gosain, R., Abdou, Y., Singh, A., Rana, N., Puzanov, I., & Ernstoff, M. S. (2020). COVID-19 and cancer: A comprehensive review. *Current Oncology Reports, 22,* 53.

Grifoni, A., Weiskopf, D., Ramirez, S. I., Mateus, J., Dan, J. M., Moderbacher, C. R., ... Sette, A. (2020). Targets of T cell responses to SARS-CoV-2 coronavirus in humans with COVID-19 disease and unexposed individuals. *Cell, 181*(7), 1489–1501.e15. https://doi.org/10.1016/j.cell.2020.05.015

Hoffman, T., Nissen, K., Krambrich, J., Rönnberg, B., Akaberi, D., Esmaeilzadeh, M., ... Lundkvist, Å. (2020). Evaluation of a COVID-19 IgM and IgG rapid test; an efficient tool for assessment of past exposure to SARS-CoV-2. *Infection Ecology & Epidemiology, 10*(1), 1754538. https://doi.org/10.1080/20008686.2020.1754538

Lau, H., Khosrawipour, V., Kocbach, P., Mikolajczyk, A., Ichii, H., Schubert, J., ... Khosrawipour, T. (2020). Internationally lost COVID-19 cases. *Journal of Microbiology, Immunology and Infection, 53*(3), 454–458. https://doi.org/10.1016/j.jmii.2020.03.013

Li, R., Pei, S., Chen, B., Song, Y., Zhang, T., Yang, W., & Shaman, J. (2020). Substantial undocumented infection facilitates the rapid dissemination of novel coronavirus (SARS-CoV2). *Science, 493,* 489–493.

Meng, L., Hua, F., & Bian, Z. (2020). Coronavirus disease 2019 (COVID-19): Emerging and future challenges for dental and oral medicine. *Journal of Dental Research, 99,* 481–487.

Odeh, N. D., Babkair, H., Abu-Hammad, S., Borzangy, S., Abu-Hammad, A., & Abu-Hammad, O. (2020). COVID-19: Present and future challenges for dental practice. *International Journal of Environmental Research and Public Health, 17,* 3151.