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ORAL DISEASES Leading in Oral, Maxillofacial, Head & Neck Medicine WILEY

LETTER TO THE EDITOR

Digitally aided telemedicine during the SARS-CoV-2 pandemic to screen oral medicine emergencies

Sir,

A new human coronavirus, known as severe acute respiratory coronavirus 2 syndrome (SARS-CoV-2), emerged at the end of 2019 in Wuhan, China, and we are now facing a pandemic (WHO, 2020). The virus has been found in saliva (Meng, Hua, & Bian, 2020; Sabino-Silva, Jardim, & Siqueira, 2020). In vitro experimental findings suggest that SARS-CoV-2 remained viable in aerosols for 3 hr (Doremalen, Bushmaker, & Morris, 2020). Consequently, given the possibility of disease transmission to oral health workers and patients, dentists in most countries have been advised to limit their practice to emergency treatment (Guo, Zhou, Liu, & Tan, 2020). WHO suggested that virus transmission is highest at the early stage of the disease and that presymptomatic and asymptomatic people may also be infectious (WHO, Report 2020). Some writers have already suggested methods to reduce the formation of droplets in different dental disciplines (Ge, Yang, Xia, Fu, & Zhang, 2020). Regarding oral medicine, the U.S. dental association classifies tissue biopsy as emergency dental therapy (ADA, 2020).

The Hellenic Dental Association suggested postponing visits and treating emergencies under strict cost/benefit calculation for patients, taking into account the risk of exposure to SARS-CoV-2. In our practice, we use telemedicine to monitor oral medicine emergencies. There are many ground-breaking telemedicine technology solutions available, most of which are used to address distance barriers to specialized health care, and a recent New England Medicine Journal (NEJM) paper considers telehealth to be a viable alternative in this difficult period (Hollander & Carr, 2020). In an article that sparkled vivid reactions from other specialists (Petruzzi & Benedittis, 2016), Petruzzi et al. screened oral medicine patients using WhatsApp mobile application with substantial "success rates." Under current circumstances, we have used all available software resources that allow users to share media (e.g., Viber and Messenger). Table 1 shows our experience. We had 16 patients of an average age of 41 years (March 16-April 11, 2020), all of whom were very pleased with the telemedicine solution. It is almost the same as one-fourth of the patients we usually treat in 4 weeks. Some of them were registered patients, others new. Evaluation of new patients with "clinical selfies" has not always been easy; common problems were the number of photographs and the quality of the information, which led to a number of communications in order to arrange them. Furthermore, the image resolution (Figure 1) varied, and even filtering could modify mobile phone images; hence, we clarified that no safe diagnosis is guaranteed. Patients submitted a variety of test results, medical history, and GDPR approvals for information processing. We could also perform electronic prescription. We have told all patients that we do not suggest a diagnosis based on cell phone pictures as our normal procedure, and we use it as a strategy to restrict non-emergency appointments during the pandemic. All patients were encouraged to contact us again if any changes in symptoms had been noted, and we urged them to schedule appointments after the pandemic ends. Digital consulting was free of charge as part of our social solidarity during the pandemic. If this takes longer, a more standardized telehealth system (i.e., video conference software with high-resolution cameras) with an adjusted electronic payment system is required. Given the urgency of minimizing unnecessary visits during this global pandemic, digitally assisted telemedicine can be an effective way to monitor oral medical emergencies.

TABLE 1 List of cases managed through digitally assisted telemedicine

Gender	Age	Type of communication	Location	Information	Medium of information	Intervention	Other interventions required	Type of communication	Diagnosis
Female	31	First contact	Other city	Full medical history available	Photographs	Therapeutic advice	Follow-up required	Viber	Erythema multiforme/or Herpetiform ulcers
Female	36	Follow-up	Same city	Full medical history available	Photographs	Therapeutic advice	No other visit required	Email	Temporomandibular joint pain
Male	3	First contact	Same city	Full medical history available	Photographs	Diagnostic advice	Follow-up required	Viber	Soft tissue reactive lesion
Female	24	Follow-up	Same City	Full Medical History Available	Photographs	Therapeutic Advice	No Other Visit Required	Email	Temporomandibular Joint Pain
Female	62	Follow-up	Same city	Full medical history available	Photographs	Follow-up	Follow-up required	Viber	Cyst of the gingiva
Male	42	Follow-up	Same City	Full Medical History Available	Photographs	Follow-up	No Other Visit Required	Viber	Erythematous Candidiasis
Female	60	First contact	Same city	Partial medical history available	Photographs	Diagnostic advice	No other visit required	Viber	Oral hairy tongue
Female	25	First contact	Same city	Full medical history available	Photographs	Palliative treatment, appointment to be scheduled ASAP	Follow-up required	Messenger contact with her doctor	Erythema multiforme (Provisional)
Male	26	Second contact	Same city	Full medical history available	Photographs	Advice	No follow-up required	Viber	Geographic tongue
Male	78	Second contact	Same city	Full medical history available	Photographs	Oncologic ADVICE	Follow-up required	Email	Oncologic dental care
Female	37	Second contact	Near city	Full medical history available	Photographs	Recall	Follow-up completed	Viber	Herpes zoster
Female	27	First contact	Same city	Full medical history available	Photographs	Advice	Follow-up completed	Messenger contact with her doctor	Secondary herpes (Palate)
Female	55	Follow-up	Same city	Full medical history available	Photographs	Advice and new prescription	Follow-up required	Viber	Oral lichen planus follow-up
Female	50	Second contact	Same city	Full medical history available	Photographs	Advice and new prescription	Follow-up required	Viber	Burning mouth syndrome
Male	50	First contact	Same city	Full medical history available	Photographs	Advice and prescription	Follow-up required	Messenger contact with his doctor	Atopic cheilitis
Female	60	Follow-up	Same city	Full medical history available	Photographs	Advice	Follow-up required	Viber	Oral lichen planus follow-up

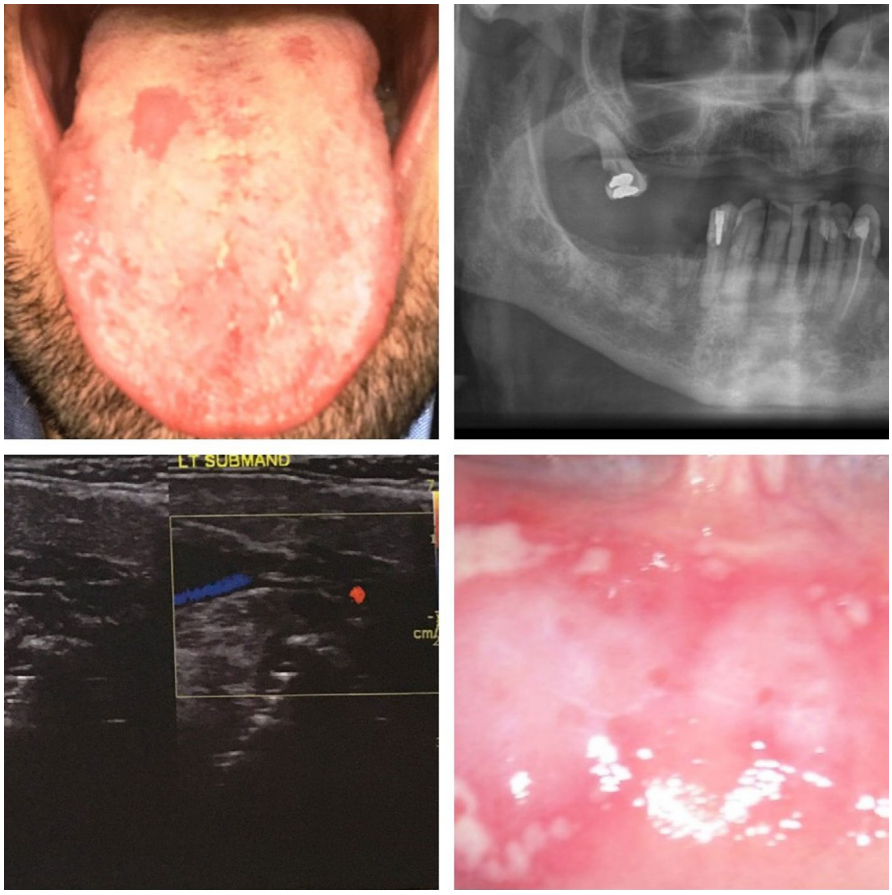

FIGURE 1 Images submitted included clinical images and reports of various laboratory investigations [Colour figure can be viewed at wileyonlinelibrary.com]

AUTHOR CONTRIBUTIONS

Eleni A. Georgakopoulou: Conceptualization; Data curation; Formal analysis; Visualization; Writing-original draft; Writing-review & editing.

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