

Delays in the diagnosis of oral cancer due to the quarantine of COVID-19 in Córdoba, Argentina

Dear Editor,

Coronavirus disease (COVID) 2019 has become a health challenge for the entire world. The first case of COVID in Argentina was reported on March 3rd, 2020.¹ In this scenario, local authorities declared a quarantine, which effectively began on March 20th and is still ongoing. Although in recent months there have been some flexibilities, Argentinian lockdown is one of the longest isolation measures worldwide.

The restrictive measures halted private and public dental care services, similar to the situation in Italy.² The government restricted transportation between cities, only allowed in critical cases. However, people are also frightened by the increased risk of COVID infection when visiting health centers.

The Oral Medicine Department (Universidad Nacional de Córdoba) remains closed since the second week of March 2020. Thus, our activities are hindered, including follow-up of oral potentially malignant disorders (OPMD) and oral cancer (OC). Due to the reduced clinical work, new visits for oral conditions were also disrupted putting those patients at risk.³ The rational use of telemedicine helped us to manage referrals.⁴ However, nowadays we are treating individuals that we have not seen in a long time as the result of this long-standing quarantine. We would like to report four cases showcasing the impact of lockdown in the follow-up of OPMD and early diagnosis of OC.

A 72-year-old female consulted with a firm ulcer on the lateral border of the tongue associated with sharp lower molars and parafunctional habits. In the first week of March 2020, an incisional biopsy was performed. The histological analysis revealed a well-differentiated oral squamous cell carcinoma (OSCC). She was referred to an oncological committee with the lesion staged as T1N0M0 (Figure 1A). The patient delayed her treatment because of the impossibility of getting from his town to our city due to the quarantine (and fear of COVID infection). She could come back later in July, and the tongue lesion had become bigger and painful, also having lymphadenopathies (Figure 1B). She was surgically treated as T3N2M0.

A 37-year-old male was referred by his dentist to our institution in February 2020. He lived in a small village 80 km from our city. Multiple white and red areas were seen on the right tongue border. Two blue toluidine-guided biopsies revealed hyperkeratosis with moderate dysplasia (Figure 1C,D). The patient could not undergo the recommended surgical procedure due to the quarantine. In June, we received photos by telemedicine showing an increase in the lesion size (Figure 1E). The biopsy identified an invasive OSCC. He was referred for oncological assessment, but he could not be treated yet.

The third case reflects the impediment in accessing a face-to-face consultation from a patient quarantined in a nursing home. A 93-year-old man presented with a painful oral lesion preventing the use of his lower denture. The first symptoms were recorded in April. Geriatric physicians advised his family not to use the denture and wait for a consultation, avoiding the risk of COVID infection. After 3 months of complaints, the case was consulted by telemedicine with our service. Only then, he was referred to a dental office, where an ulcerated and bleeding tumor was evidenced. It was diagnosed as an invasive OSCC (Figure 2A) with bone invasion.

The last case is a 63-year-old female with a chief complaint of a mass located on the upper gingiva. An incisional biopsy was performed by her dentist revealing a verrucous carcinoma (Figure 2B). The tumor did not infiltrate the maxillar bone. It was staged as T2N0M0. Nonetheless, due to the COVID-related delay in the oncological treatment, the lesion became an OSCC with an invasive pattern and bone infiltration (Figure 2C). The patient had to undergo a surgery far more extensive than if it was done earlier. Another drawback in this case was the impossibility of moving from her town to our city (120 km) due to the quarantine.

The previous cases highlight how this pandemic made diagnosis and prognosis more difficult in our population, involving the three kinds of cancer delays previously described by Morelato et al: diagnosis delay (by patients

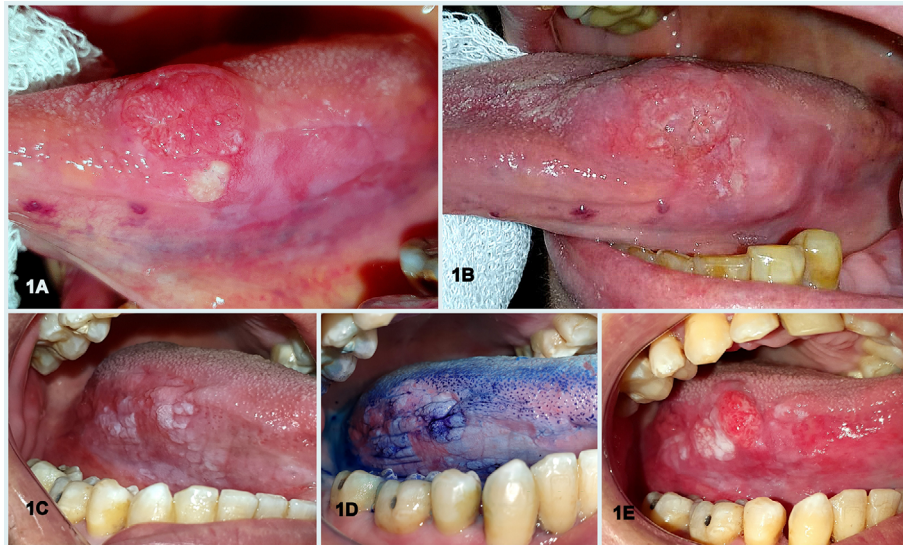


FIGURE 1 A, Initial consultation: 1 × 1 cm indurated ulcer with white borders on the lateral border of the tongue, diagnosed as OSCC, stage T1N0M0. B, After 6 months, the patient returned with pain and the lesion was larger, being reclassified as T3N2M0. C, An extensive lesion with white and red areas on the right lateral border of the tongue, firm on palpation. D, Blue toluidine stain. The histopathology revealed moderate dysplasia. E, The patient returned 3 months later with a painful exophytic mass. A new biopsy informed invasive OSCC, then staged as T2N0M0

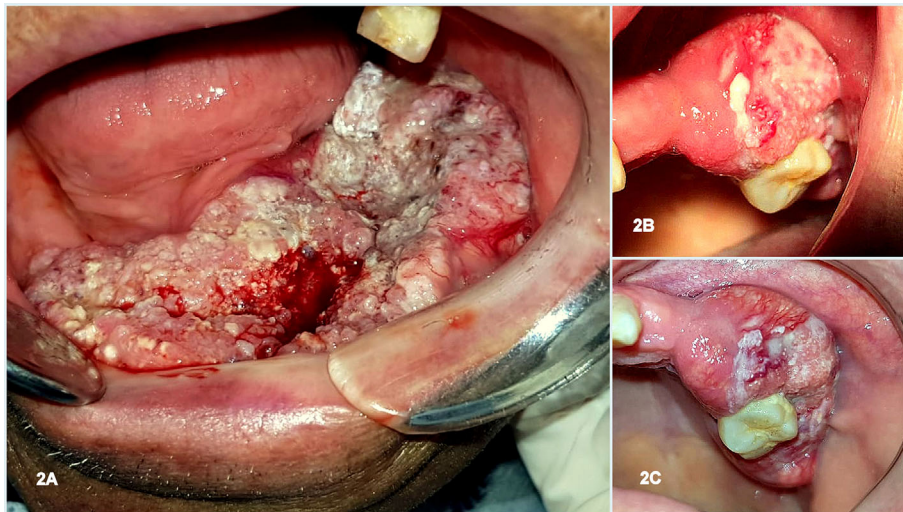


FIGURE 2 A, An extensive tumor with an ulcerated and verrucous surface involving lower alveolar edentulous ridge, part of the buccal mucosa, labial mucosa, and floor of the mouth. During the examination there were bleeding, pain, and fetid halitosis. The lesion was diagnosed as OSCC. B, The picture was taken by her dentist and sent to our institution by telemedicine. A verrucous mass located on the upper gingiva next to a molar without signs of tooth mobility or bone invasion. C, Two months later, the patient could not be treated and was rebiopsied with a diagnosis of OSCC involving bone and compromised the maxillary sinus

and professionals) and treatment delay (by hospitals).⁵ In our cases, the delay in OC diagnosis and treatment was mostly related to the quarantine and lockdown. Regarding hospitals and treatment delays, although oncologic surgical procedures should be avoided during the pandemic, there is no convincing evidence that cancer therapies are contraindicated.⁶ In a study performed in our institution

before the pandemic, 60% of all OC were either Tis, T1, or T2.⁷ Therefore, the pandemic could have affected tumor staging at the first visit and cause management postponement. Another study, published in a local journal, showed that delay in the OC diagnosis regarding patient and professional was roughly 2.5 months for the former and 40 days for the latter.⁸ We do not have data concerning

therapeutic delay, but OC cases are immediately referred for treatment.

Another reason to ponder is the *stress* secondary to the outbreak, which could also induce deleterious habits, increasing even more the risk of OSCC and OPMD. Since the lockdown might continue, oral health professionals should be aware of early symptoms of OC³ as well as encourage patients to perform oral auto examination.

In broad strokes, two settings are displayed. In one, surgery postponement is preferred in the sake of patient safety.⁹ On the other hand, the delay in OC diagnosis and treatment could lead to more advanced stages, with higher morbidity and mortality rates. There is no conclusive evidence of which approach poses less risk for the patient. *Prima facie*, it would seem that treatment delay in fast-growing diseases as OC is causing a bigger problem.

Finally, efforts should be made to assure OC patients access to treatments, prioritizing oncological interventions. We agree with Trapani et al that *social responsibility* is the most critical element for the COVID pandemic. Oncological patients are in a frail and vulnerable state, so their protection must be ensured with proper diagnosis and treatment.¹⁰

ACKNOWLEDGMENT

The authors thank Prof Rosana Morelato for sharing her data regarding oral cancer diagnosis delay before COVID in our population.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest that could be perceived as prejudicing the impartiality of the research reported.

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