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Letter to the editor

Covid-19 pandemic and head and neck cancers, what should we expect?



To the Editor,

One year after the first case of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in Italy, the COVID-19 emergency has been affecting our country; however, it is early to really understand the social implications of the pandemic. Instead, what we can try to predict is what has already happened in the field of head and neck (HN) oncology and, above all, what we should expect in the coming months. Since February 21, 2020, when the first case of COVID-19 was reported in Italy [1,2], the Italian Health System's ability to respond to the COVID-19 emergency has been severely tested in terms of human and economic resources [3]. It is neither known nor foreseeable what effects the pandemic has had on the diagnosis and treatment of these patients [4]. The lockdown has caused a blockage of outpatient visits to general practitioners, dentists, and specialists such as maxillofacial or ENT surgeons, thus significantly limiting access to screening visits for oral cancer patients. The effects of COVID-19 on the population of patients potentially suffering from HN cancer are manifold. Patients suffering from this pathology are often socially marginalized - smokers, alcohol abusers – and unlikely to access private care facilities. Onset symptoms, such as dental or mucous membrane pain and neck swelling, can be confused with the symptoms of an infection of the oral cavity or dental abscess. If these patients are not visited, it is easy to underestimate these symptoms and treat them with antibiotic or corticosteroid therapy. The difficulties in treating patients with HN cancer during this pandemic [5,6] have been faced and overcome by putting into practice the prevention strategies suggested by the international literature [7]. What has recently been highlighted, both in literature and our clinical practice, is how the diagnostic and therapeutic delay affects the patients' outcomes [8,9]. This delay is partly due to patient-related factors (social distancing and travel restrictions during the pandemic makes it challenging to attend the hospital for treatment) and partly to healthcarerelated factors. The pandemic is affecting both treatment-naive patients, as it worsens survival and quality of life and aggravates psychological impact, and follow-up patients, as it delays their visits [10]. What caught our attention in these months is the number of outpatient biopsies and new cancer diagnoses, compared to the same period of the previous year. A comparison between the outpatient biopsies performed in our Department from March to December 2019 and those performed in 2020 shows a significant reduction in their number (Table 1). In 2019, 268 biopsies were performed, while only 93 in 2020 –a difference of 175 procedures. The decrement is due to the lockdown in the first place, but also to the limited number of procedures that can be performed daily in

the clinic to comply with the preventive measures, i.e., by rigorously scheduling appointments. The percentage of malignant tumors diagnosed in 2019 is 34.4% on 268 procedures (92 patients) and 34.5% (32 patients) in 2020; considering this data, the question is: out of all the patients who did not undergo the biopsy, how many are affected by a malignant tumor?

Furthermore, patients treated in recent months were frequently at very advanced stages, but further studies are needed to confirm this suggestion. Considering that the incidence of HN cancer cannot be decreased, how many diagnostic delays will be caused by the pandemic? How many patients will undergo less thorough treatments or, even worse, will not be treated surgically and will be referred to palliative care for the extreme stage of the disease?

Two admonishments we must learn from the lesson that COVID19 taught us. First, prevention and screening services must always be guaranteed, especially for the weaker social classes. Second, the health-care systems' capacity and financing need to be increased in order to face this new reality, wherein we must live with the virus and all the maneuvers essential to its confinement. To date, we have suffered the short-term effects of this pandemic, but the long-term repercussions are foreseeable and cannot be underestimated.

Table 1Sample characteristics. OLSCC: oral and lip squamous cell carcinoma; MSG: minors salivary glands; ITAC: Intestinal-type adenocarcinoma; SNUC: Sinonasal undifferentiated carcinoma.

| Biopsies (March-December) 2019 | 268 |
|----------------------------------|-------------|
| Benign | 176 (65.7%) |
| Malignant | 92 (34.3%) |
| ###OLSCC | 82 (89%) |
| ###Lymphoma | 3 |
| ###Melanoma | 2 |
| ###Adenocarcinoma of the MSG | 2 |
| ###Ameloblastic carcinoma | 1 |
| ###ITAC | 1 |
| ###SNUC | 1 |
| Biopsies (March - December) 2020 | 93 |
| Benign | 61 (65.6%) |
| Malignant | 32 (34.4%) |
| ###OLSCC | 27 (84.4%) |
| ###Lymphoma | 2 |
| ###Carcinosarcoma | 1 |
| ###ITAC | 1 |
| ###Metastasis | 1 |

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- [1] Tuite AR, Ng V, Rees E, Fisman D. Estimation of COVID-19 outbreak size in Italy. Lancet Infect Dis 2020;20:537. https://doi.org/10.1016/S1473-3099(20)30227-9.
- [2] Ministry of Health of Italy, Covid-19 Situazione in Italia. http://www.salute.gov. it/portale/nuovocoronavirus/dettaglioContenutiNuovoCoronavirus.jsp?lingua=ita liano&id=5351&area=nuovoCoronavirus&menu=vuoto [accessed March 19, 2020]
- [3] Armocida B, Formenti B, Ussai S, Palestra F, Missoni E. The Italian health system and the COVID-19 challenge. Lancet Public Health 2020;5:e253. https://doi.org/ 10.1016/S2468-2667(20)30074-8.
- [4] Brody RM, Albergotti WG, Shimunov D, Nicolli E, Patel UA, Harris BN, et al. Changes in head and neck oncologic practice during the COVID-19 pandemic. Head Neck 2020;42:1448–53. https://doi.org/10.1002/hed.26233.
- [5] Valentini V, Pucci R, Battisti A, Cassoni A. Head and neck cancer cannot wait for this pandemic to end: Risks, challenges and perspectives of oral-maxillofacial surgeon during COVID-19. Oral Oncol 2020;106:104758. https://doi.org/ 10.1016/j.oraloncology.2020.104758.
- [6] Cassoni A, Pucci R, Mangini N, Fadda MT, Battisti A, Giovannetti F, et al. Head and neck cancer treatment during COVID-19 pandemic: a central experience in Rome emergency management, infection prevention and control. Cancers 2021;13:33. https://doi.org/10.3390/cancers13010033.
- [7] Zaid W, Schlieve T. The early effects of coronavirus disease-2019 on head and neck oncology and microvascular reconstruction practice: a national survey of oral and maxillofacial surgeons enrolled in the head and neck special interest group. J Oral Maxillofac Surg 2020;78:1859–68. https://doi.org/10.1016/j.joms.2020.07.012.
- [8] Mahl C, de Melo LRS, Almeida MHA, Carvalho CS, Santos LLS, Nunes PS, et al. Delay in head and neck cancer care during the COVID-19 pandemic and its impact on health outcomes. Braz Oral Res 2020;34:e126. https://doi.org/10.1590/1807-3107bor-2020.vol34.0126.

- [9] Kutikov A, Weinberg DS, Edelman MJ, Horwitz EM, Uzzo RG, Fisher RI. A war on two fronts: cancer care in the time of COVID-19. Ann Intern Med 2020. https://doi. org/10.7326/M20-1133.
- [10] Kumar D, Dey T. Treatment delays in oncology patients during COVID-19 pandemic: a perspective. J Glob Health n.d.; https://doi.org/10.10.7189/ jogh.10.010367.

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