Increased mortality from head and neck cancer due to SARS-CoV-2 pandemic

Head and neck cancer has been directly affected, from diagnosis to treatment in patients with this disease or who have not yet been diagnosed with this pathology, due to the interruption of health care that is currently directed almost exclusively to the care of patients with SARS-CoV-2 and the effects of this pandemic. Previous disasters experienced, such as the post-Hurricane Katrina period, reduced access to cancer care and was significantly associated with difficulty obtaining treatment. This situation can increase the number of untreated advanced cancer patients and decrease their survival in Brazil due to the state of the pandemic. Primarily because high viral loads of SARS-CoV-2 are located in the upper aerodigestive tract, and procedures in this area (e.g., endoscopy, tracheostomy, surgery, etc.) lead to aerosolization of viral particles, they not only represent a high-risk group for spreading the virus during intervention but also have a higher risk of severe disease if they are infected.\(^1\) Furthermore, treatment of these patients increases the risk of infection among health care workers, including otolaryngologists, which could result in further spread of SARS-CoV-2 and limit the number of healthy health care workers who can care for patients. In fact, the first reported physician fatality was that of an otolaryngologist in Wuhan. For these reasons, special attention is required to ensure safe and appropriate care of this important subset of patients. Diagnosis depends on endoscopic procedures in the upper airways and, therefore, aerosol generators, thus postponed at the peak of the pandemic to be performed on the return of elective activities. Many nursing staff and other hospital professionals in medical specialty outpatient clinics and pathological anatomy laboratories were moved to other hospital services due to the removal of professionals contaminated by SARS-CoV-2. Many professionals have been excluded from the risk of contamination. Thus, a delay in the diagnosis of primary head and neck cancer is expected. Outpatient elective activities were suspended or reduced, and many patients avoiding seeking initial medical consultation for diagnosis of the disease for fear of contamination at the time of the pandemic. Some of the biggest challenges include hospital bed shortage, inadequate numbers of healthcare professionals and personal protective equipment (PPE). Given these restrictions, there was a reduction in elective care to reduce transmission and conserve personal and financial resources. There is a recommendation that patients with head and neck cancer, which can be treated non-surgically according to international guidelines, should be referred to this therapeutic modality.\(^2\) But the reduction of professional staff and the fear of hospital contamination by the virus may have delayed the beginning of this treatment as well. The doubling time of head and neck cancer is between 15 to 99 days and it is proven that delaying treatment decreases survival in these patients. The American Cancer Society in the United States of America conducted a survey of 1,200 cancer patients. They documented 79% of patient with underactive treatment from delay (chemotherapy, radiotherapy, hormone therapy).\(^3\) According to a study published in the British Medical Journal in April 2020, there may be an increase of up to 20% in cancer mortality due to the pandemic by corona virus.\(^4\) At the University of Texas MD Anderson Cancer Center, one of the largest cancer centers in the world, an analysis of epidemiological and demographic data observed a 46.7% drop in outpatient visits and 46.8% of surgeries performed from March 1, 2020 to April 9, 2020, compared to the same time interval in 2019.\(^5\) With the gradual return in elective outpatient care in hospitals one can expect an increased number of patients with advanced stage cases and institutions need to be prepared for a new burden of patients. Finally, survivors of head and neck cancer are at risk for emotional distress, hoarseness, dysphagia, pain, and decreased quality of life. Since some of their needs (like speech language pathologists) may not be met during the COVID-19 pandemic, it will be important to ensure that attention is centered on their care when resources improve and fewer restrictions relating to social distancing are finished. COVID-19 continues to have widespread effects on the field of Otolaryngology – Head and Neck Surgery. In the coming year, there will very likely be a surge of patients with delayed clinical presentations. Institutions need to be proactive in anticipating and preparing for the potential influx of patients as public health guidelines shift from social dis-

https://doi.org/10.1016/j.bjorl.2020.11.001
1808-8694/© 2020 Associação Brasileira de Otorrinolaringologia e Cirurgia Cérvico-Facial. Published by Elsevier Editora Ltda. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).
tancing to containment strategies. By implementing tactics to mitigate and ultimately deal with this surge, patients should receive quality care but with increased number of advanced cases the health system must be prepared to more challenging situations.

**Conflicts of interest**

The authors declare no have conflicts of interest.

**References**


Carlos Takahiro Chone

*Universidade de Campinas, Departamento de Otorrinolaringologia e Cabeça e Pescoço, Campinas, SP, Brazil*

*E-mail: cchone@icloud.com*