

# Will a tumor pandemic come after the COVID-19 pandemic? Head and Neck cancer perspective

G. MANNELLI<sup>1</sup>, R. SANTORO<sup>1</sup>, P. BONOMO<sup>2</sup>, I. DESIDERI<sup>2</sup>, G. SPINELLI<sup>3</sup>

<sup>1</sup>Department of Experimental and Clinical Medicine, Head and Neck Oncology and Robotic Surgery, University of Florence, Florence, Italy

<sup>2</sup>Radiation Oncology, Azienda Ospedaliero-Universitaria Careggi, University of Florence, Florence, Italy

<sup>3</sup>Department of Maxillo Facial Surgery, Azienda Ospedaliero-Universitaria Careggi, Florence, Italy

**Abstract.** – The COVID-19 pandemic demands a reassessment of head and neck oncology treatment paradigms by posing several challenges for oncology services, with unprecedented pressure on the regional health care system. Since February 2020 this has severely disrupted health-care services, leading to accumulating clinic caseload and substantial delays for operations. The head and neck cancer services have been faced with the difficult task of managing the balance between infection risk to health-care providers and the risk of disease progression from prolonged waiting times. Herein, we share our experience in Firenze (Italy) and propose our action plan on the management of head and neck cancer services *via* multi-institution collaboration.

*Key Words:*

COVID-19 pandemic, Head and neck cancer, Government measures, Tumor diagnostic delay.

In Italy, since February 2020, hospital admissions, clinic attendances and medical resources have been significantly diverted to tackle the Coronavirus disease-19 (COVID-19)-pandemic with a subsequent reassessment of head and neck cancer patients management<sup>1</sup>. COVID-19 has delayed all the screening and follow-up programs and, by looking at the immediate post-lockdown oncology service admissions, we are confronted with the question as whether the risk-benefit ratio was to a large extent negatively affected. Are we going to face a greater number of advanced, less curable cases in the upcoming months?

The COVID-19 pandemic has demanded reassessment of head and neck oncology treat-

ment paradigms by posing several challenges for oncology services and it is undoubted that the National Health System has been under unprecedented pressure during the last three months<sup>2</sup>. In this regard, the European Society of Surgical Oncology (ESSO) advised against seeing patients older than 70 years in the clinic, unless urgent<sup>3</sup>; the Governor of Tuscany itself, has issued ordinances reporting advises and guidelines emphasizing the importance of recognizing patients' urgency priorities by preserving the workforce from burn-out. On the other hand, these measures have postponed non-urgent appointments, whose evaluations were entrusted to general practitioners and not to head and neck specialists, and efforts to relocate cancer teams and services away from general hospitals caring for patients with COVID-19 were not undertaken. These conditions, added to travel restrictions and widespread apprehension, generated a significant reduction in investigations for new cancer diagnoses and cancer surgery, which drastically decreased crucial insights to undertake cancer patients' decision-making. Lastly, the effects of COVID-19 are not solely limited to the treatment of patients with cancer, but will also hit the wider oncology community, with inevitable consequences for research, education, and collaboration<sup>4</sup>.

To confront the challenge of limited resources and reduced operating lists, Italian head and neck centers stratified operations according to the aggressiveness of the tumor, potential effect on reconstruction, and anticipated complications<sup>5</sup>. In this setting, it does merit brief acknowledgment that the effect of a reasonable

delay in the management of particular low-risk malignancies (i.e. skin cancers or low grade salivary malignancies) will only marginally affect the quantity and quality of life. Conversely, the treatment for potentially curable cancers with a concrete risk of becoming not resectable or not eligible for treatment with curable intent cannot be safely postponed<sup>6</sup>.

In order to avoid serious ethical issues and preserve the highest standards of care and treatment for patients, head and neck cancer multidisciplinary team remained the best strategy to opt for balanced and appropriate treatments our patients deserve, without affecting their quantity and quality of life. From our preliminary analysis insights, we observed a three-fold increase in advanced cancer stages diagnoses between April and May 2020 when compared with the same period of the last year (63.5% vs. 21.8%). Interestingly, non-surgical treatment indications almost doubled for same stage cases (21.2% vs. 16.6%).

Online consultation/telehealth has been strongly recommended by oncology organizations, including the European Society for Medical Oncology, but it represents a huge change in how staff interact with patients and it is not always suitable for each patient either oncology specialists<sup>7</sup>. It has been predicted that new ways of working in cancer care during the COVID-19 pandemic will permanently change oncology services, after evaluating their impact<sup>8</sup>.

In our opinion, action plan should include multilevel risks stratifications, strengthen safety measures and diagnostic facilities to face the increase in workload, complexity of the disease, overlapping problems including COVID-19 potential new infections. Head and Neck regional cancer HUBs should be encouraged to provide outpatients assessment, including all of the safety measures and diagnostic facilities; one-day staging and pre-hospitalization schedule, to allow the multidisciplinary tutor board group to express treatment indications in one setting without requiring one week more to complete the staging process. Furthermore, in the post-lockdown phase, we need to avoid backlashes even on social and economic aspects, by eliminating misconceptions<sup>9</sup>.

Now, we need to promote patients' safety, treatment, and compliance, and ameliorating patients' stress. This awareness should be guided by social-media and policymakers, because

once the fear of COVID-19 will diminish, problems related to diagnostic and treatment withdrawal will remain<sup>10</sup>.

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#### Conflict of Interest

The Authors declare that they have no conflict of interests.

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#### Availability of Data and Materials

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

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#### Authors' Contribution

All of the authors have contributed equally to the manuscript.

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