Journal Pre-proofs

Letter to the Editor

The impact of Coronavirus (COVID-19) on head and neck cancer patients' care

De Felice Francesca, Polimeni Antonella, Tombolini Vincenzo

PII:	S0167-8140(20)30151-1
DOI:	https://doi.org/10.1016/j.radonc.2020.03.020
Reference:	RADION 8224

To appear in: Radiotherapy and Oncology

Received Date:19 March 2020Revised Date:20 March 2020Accepted Date:20 March 2020



Please cite this article as: Felice Francesca, D., Antonella, P., Vincenzo, T., The impact of Coronavirus (COVID-19) on head and neck cancer patients' care, *Radiotherapy and Oncology* (2020), doi: https://doi.org/10.1016/j.radonc.2020.03.020

This is a PDF file of an article that has undergone enhancements after acceptance, such as the addition of a cover page and metadata, and formatting for readability, but it is not yet the definitive version of record. This version will undergo additional copyediting, typesetting and review before it is published in its final form, but we are providing this version to give early visibility of the article. Please note that, during the production process, errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

© 2020 Elsevier B.V. All rights reserved.

The impact of Coronavirus (COVID-19) on head and neck cancer patients' care

De Felice Francesca¹, Polimeni Antonella², Tombolini Vincenzo¹

¹ Department of Radiotherapy, Policlinico Umberto I "Sapienza" University of Rome, Viale Regina Elena 326, 00161, Rome, Italy ² Department of Oral and Maxillo Facial Sciences, Policlinico Umberto I, "Sapienza" University of

Rome, Via Caserta 6, 00161, Rome, Rome, Italy

Correspondence to: Francesca De Felice Department of Radiotherapy, Policlinico Umberto I "Sapienza" University of Rome, Viale Regina Elena 326, 00161 Rome, Italy Phone: +390649973411 Fax: +390649973411 e-mail fradefelice@hotmail.it

Keywords: COVID-19; coronavirus; head neck cancer; radiotherapy; surgery; chemotherapy; care; treatment; follow-up.

To monitor and defeat further progression of the novel Coronavirus (COVID-19) infection, a strong public health vigilance has been adopted in Italy [1]. By March 18, 31,772 cases were confirmed, with 2,390 deaths [2]. The median age of patients who are infected is 63 years and more than two-thirds of deaths have occurred in elderly patients (aged \geq 70 years) [2]. Hospitals' work regimes have been re-prioritized, but Coronavirus does not really affect the cancer clinics. Although radiation oncologists are not fighting on the front line, they have to guarantee treatment – radiotherapy with or without concomitant chemotherapy ((C)RT) – and, in the meantime, protect patients from the COVID-19 infection.

In this scenario, (C)RT has a crucial role in head and neck cancer (HNC) management. It is the mainstay of treatment for most of the HNC sites, because of its proven curative intent assuring an organ preservation strategy [3-4]. HNC is a relatively rare cancer in Italy, with 9,300 new cases and 3,216 deaths described per year [5]. Most of the patients are diagnosed in a locally advanced stage disease and should receive treatment as soon as possible. Therefore, during this pandemic period, HNC patients represent a major clinical problem with treatment decision-making process. Due to the complexity in optimal strategy plan and patients' support care through treatment, the multidisciplinary team should weigh the risks and the benefits to patients in deciding whether to modify patients' work-up and treatment approach. We cannot provide specific guidance on any other protocol of therapy - at this time, no clinical HNC-specific data on COVID-19 are available but we can state that each decision requires an individualized risk/benefit assessment. The aim should be to protect HNC patients without compromising their oncologic outcome. It is paramount to stress open channels of communication between administrators, clinicians, patients and caregivers [6]. In order to assist shared decision-making, multidisciplinary team meetings should be promoted using web-platforms. A reasonable treatment strategy between anticancer therapy and epidemic prevention should be selected. It should be considered to: i) omit systemic therapy for patients \geq 70 years or younger with co-morbidities, such as diabetes and cardiovascular diseases. On the one hand, the updated meta-analysis of chemotherapy in head and neck cancer (MACH-NC) did not show any survival benefit resulting from the addition of chemotherapy for elderly patients [3]. On the other hand, these relevant co-morbidities are linked to a higher risk of death in case of COVID-19 infection [7]. ii) omit cisplatin-based induction chemotherapy. A definitive benefit in overall survival with the incorporation of induction chemotherapy compared to standard (C)RT has not been proven in randomized studies [8]. iii) short overall treatment time. Definitive (C)RT should be limited to simultaneous integrated boost (SIB) techniques in the standard (5 fractions per week) or accelerated schedule (6 fractions per week), in order to achieve a 1-week reduction compared to sequential technique. SIB technique represents an optimum balance between tumor control and prevention of late toxicity excess [9]. iv) delay post-operative RT in patients with salivary gland tumors until 12 weeks after surgery. Time factor is not strictly linked to adverse effect in these cases [10]. v) develop an online surveillance plan. At present HNC patients deal with the double ordeals of disease and pandemic situation. Patients should be educated to properly identify those symptoms and signs that potentially signify a recurrence (increased local pain and difficulty in swallowing, unexplained weight loss and development of new lump in the head and neck region). For sure, patients should be informed regarding the Coronavirus symptoms (mainly fever, dyspnea and cough) and educated in proper hand washing and all other measures to limit viral transmission (avoid touching your eyes, nose and mouth; cover your nose and mouth with a tissue when you cough or sneeze; clean and disinfect high touch surfaces regularly; stop shaking hands or kissing as a greeting; reduce exposure to sick contacts and large crowds). Psychological counseling should be paid attention to through seeking alternative schemes. It must be appreciated that this document is an attempt to provide practical suggestions on how to define a reasonable treatment strategy and mitigate the COVID-19 impact on HNC patients under the current pandemic conditions. It is necessary to offer adequate individualized treatment recommendations based on both the epidemic situation and the patient's own condition. We

significantly hope to help HNC patients to survive this difficult period.

Acknowledgements None Conflict of Interest No

References

- [1] <u>https://www.gazzettaufficiale.it</u>
- [2] https://www.epicentro.iss.it/coronavirus/bollettino
- [3] Pignon JP, le Maître A, Maillard E, Bourhis J; MACH-NC Collaborative Group. Meta-analysis of chemotherapy in head and neck cancer (MACH-NC): an update on 93 randomised trials and 17,346 patients. Radiother Oncol. 2009;92(1):4-14.
- [4] National Comprehensive Cancer Network (NCCN). Guidelines Head and Neck Cancers, Version 1.2020. available at http://www.nccn.org.
- [5] AIOM (2019). AIRTUM. I numeri del cancro in Italia. Il Pensiero Scientifico; 2019.
- [6] National Comprehensive Cancer Network (NCCN). How to Manage Cancer Care during COVID-19 Pandemic. available at http://www.nccn.org.
- [7] Remuzzi A, Remuzzi G. COVID-19 and Italy: what next? Lancet. 2020. pii: S0140-6736(20)30627-9.
- [8] Blanchard P, Bourhis J, Lacas B, Posner MR, Vermorken JB, Cruz Hernandez JJ, Bourredjem A, Calais G, Paccagnella A, Hitt R, Pignon JP; Meta-Analysis of Chemotherapy in Head and Neck Cancer, Induction Project, Collaborative Group. Taxane-cisplatin-fluorouracil as induction chemotherapy in locally advanced head and neck cancers: an individual patient data meta-analysis of the meta-analysis of chemotherapy in head and neck cancer group. J Clin Oncol. 2013;31(23):2854-60.
- [9] Overgaard J, Hansen HS, Specht L, Overgaard M, Grau C, Andersen E, Bentzen J, Bastholt L, Hansen O, Johansen J, Andersen L, Evensen JF. Five compared with six fractions per week of conventional radiotherapy of squamous-cell carcinoma of head and neck: DAHANCA 6 and 7 randomised controlled trial. Lancet. 2003;362(9388):933-40.
- [10] Terhaard CH, Lubsen H, Rasch CR, Levendag PC, Kaanders HH, Tjho-Heslinga RE, van Den Ende PL, Burlage F; Dutch Head and Neck Oncology Cooperative Group. The role of radiotherapy in the treatment of malignant salivary gland tumors. Int J Radiat Oncol Biol Phys. 2005;61(1):103-11.