Adapting head and neck cancer management in the time of COVID-19

the Head and Neck International Group (HNCIG); Mehanna, Hisham

DOI:
10.1016/j.ijrobp.2020.04.017

Document Version
Peer reviewed version

Citation for published version (Harvard):
the Head and Neck International Group (HNCIG) & Mehanna, H 2020, 'Adapting head and neck cancer management in the time of COVID-19', *International Journal of Radiation: Oncology - Biology - Physics* , vol. 107, no. 4, pp. 628-630. https://doi.org/10.1016/j.ijrobp.2020.04.017

International Journal of Radiation Oncology • Biology • Physics

Adapting head and neck cancer management in the times of COVID-19

--Manuscript Draft--

Manuscript Number:	ROB-D-20-00566
Article Type:	Editorial
Section/Category:	Editorial
Corresponding Author:	Hisham Mehanna, PhD University of Birmingham Birmingham, UNITED KINGDOM
First Author:	Hisham Mehanna, PhD
Order of Authors:	Hisham Mehanna, PhD
	Maura Gillison, MD PhD
	Anne Lee, MD
	Sandra von Zeidler, DDS MS PhD
	Sandro Porceddu, MBBS MD

Adapting head and neck cancer management in the times of COVID-19.

Hisham Mehanna (1), Maura Gillison (2), Anne W M Lee (3), Sandra V von Zeidler (4), Sandro Porceddu (5)

1. Prof Hisham Mehanna, PhD, FRCS (ORL) , Director, Institute for Head and Neck Studies and Education, University of Birmingham, UK
2. Maura Gillison, MD PhD, University of Texas MD Anderson Cancer Center, Houston USA
3. Anne W M Lee, MD, Clinical professor and Head, Department of Clinical Oncology, University of Hong Kong, China.
4. Prof Sandra V von Zeidler, DDS, MS, PhD, Coordinator, Postgraduate Program in Biotechnology, Federal University of Espírito Santo, Brazil
5. Sandro Porceddu, MBBS, MD, University of Queensland, Princess Alexandra Hospital, Brisbane, Australia

Corresponding Author:
Professor Hisham Mehanna
Chair of Head and Neck Surgery
Institute for Head and Neck Studies and Education
University of Birmingham
Birmingham
UK
H.Mehanna@bham.ac.uk
+44 (0)121 414 6547

Conflict of interest statement:
Dr. Mehanna reports personal fees from MSD, personal fees from Sanofi Pasteur, personal fees from Merck, grants from GSK Biologicals, grants from AstraZeneca, grants from GSK PLC, other from Warwickshire Head Neck Clinic Ltd, other from MSD, outside the submitted work; .

Acknowledgement

Professor Mehanna is a National Institute for Health Research (NIHR) Senior Investigator. The views expressed in this article are those of the author(s) and not necessarily those of the NIHR, or the Department of Health and Social Care.

Editorial

Adapting head and neck cancer management in the times of COVID-19.

We are living in ‘unprecedented’ times! How many times have we heard that in the last three months? Indeed, it almost does not register any more.

We are fortunate that few of us have experienced war in recent times. But for those of us who have, the current situation is reminiscent of life and health care during wartime.

The COVID-19 pandemic has touched every dimension of our lives: Our daily behaviours, our interactions with family and friends, our leisure time, and quite dramatically our work. As clinicians, the effect on clinical practice has been possibly the hardest with which to contend. The nature of the adaptations that have become increasingly necessary, and the scale and speed with which they have had to be implemented, has truly been ‘unprecedented’.

Operating capacity has been slashed, as operating rooms are converted into intensive care space, and operating staff redeployed to man those beds. Ward beds are no longer available to accommodate routine surgical cases. Those patients requiring post-operative intensive care can no longer have their operations. Operative theaters are rationed, with each case reviewed and approved only by committee.

As a result, we are adapting by doing less extensive surgery, even if it may mean worse functional outcomes, and by accepting delays that we would not normally countenance. Other patients are recommended radiotherapy instead of surgery. And in some regions, systemic therapy is being considered as a means to delay surgical procedures.

Medical and radiation oncology services have had to adapt rapidly too. Many have experienced increases in caseload, because of the reasons above. Yet at the same time, they have had to cope with considerable reductions in staff, due to COVID-19 infection or self-isolation. Many services in regions considered “hot-spots” for COVID-19 have therefore had to re-consider the standard risk benefit ratio with which we are normally comfortable . They have had to consider hypo-fractionation radiotherapy regimens, to shorten treatment durations, reduce visits and exposure to hospital, and to increase patient throughput. In addition, many have weighed up the benefit of concomitant chemotherapy against the significant increase in acute toxicity, potential complications and associated hospital admissions, as well as the need for more intensive monitoring. As a result, some have opted for the omission of concomitant chemotherapy in the curative setting.

Because of the lack of evidence and literature about COVID-19, we have had to undertake these decisions with a high degree of uncertainty. There are many unanswered questions: will

COVID-19 patients tolerate radiotherapy in a similar way to non-COVID patients; is immunotherapy protective or a risk factor for COVID-19 infection and severity; does immunosuppression associated with HNC and its therapy impact COVID-19 outcomes; does COVID-19 infection increase the risk of complications of surgery; what is the best tracheostomy technique to reduce aerosol generation; are remote follow-up consultations or no consultations at all safe for head and neck cancer patients; and who should be prioritised for treatment in the setting of severe shortages of capacity - should a highly curable patient be prioritized over a palliative patients with symptoms?

As never before, we have become acutely aware (and appreciative) of the critical role that research has in guiding our daily practice. And yet, we have had to suspend many research activities. How do we try to maintain ongoing research, given the necessity to halt clinical trial enrollment to preserve resources and to comply with physical distancing? How do we make up for lost opportunities due to closure of laboratories doing critical correlative science?

We have been collectively exposed to stresses that we may have never encountered before. Many of us have had to care for patients outside their own specialties. Some of us have had to learn to do venesection or use the stethoscope again after many decades. And we have all reached out for the physiology book or the online tutorial on the respiratory system and blood gases.

We have also learnt that some of us - especially in otorhinolaryngology, dentistry, maxillofacial surgery, ??and ophthalmology?? - appear to be at even higher risk of COVID-19 infection and occasionally death, presumably due to high viral loads in the upper airways and regular exposure to aerosol generating procedures, such as nasal endoscopy, dental procedures, tracheostomy and upper airway surgery. Severe curtailment of the procedures have now been instituted in many centres.

Our physician-patient relationships are also being strained. How do we balance the need to provide the best possible care with restrictions on access to personal protection equipment, operative theaters and intensive care? How do we best balance accurate assessments of toxicities with travel and exposure risks to our patients with face-to-face visits? How do we seamlessly transfer care from major referral centers to local community oncologists and reassure patients that this will not affect outcomes?

Further, some of us have had to take very difficult decisions on who would be ventilated and who should not. These are decisions that we are used to in our normal clinical practice in oncology, but not at such frequency, scale or for non-cancer indications.

These are unprecedented psychological stressors. We need to ensure that working practices allow for downtime and recovery so that we do not burn out. And like no time before, we need to be able to support and care for our fellow clinicians and colleagues. Petty disagreements, dysfunctional working relationships and unhelpful specialty territorial boundaries have no place in these ‘unprecedented’ times.

One of the important ways of reducing the stress of uncertainty and unfamiliarity in clinical practice has been the rapid development of guidance by different professional bodies. Their availability has been very welcome to the overstretched, overstressed clinicians working on the front line. However, due to lack of time, resources and available evidence, these are usually developed by local or national bodies and are based on small group expert opinion.

In this issue, a new international guideline for the treatment of HNC patients with head and neck cancer by radiotherapy during COVID-19 pandemic (1) is published. The authors completed three rounds of a Delphi consensus process, that involved 30 radiation oncology experts from around the world, including China and south-east Asia who have had to deal with the virus the longest. The resulting guidance, endorsed by ASTRO, ESTRO and the Head and Neck Cancer International Group, makes available the considered consensus advice of this international group of experts. There are several strengths of the approach used by this guideline: The qualitative scientific methodology, the involvement of experts from across the globe, and the consideration of two different pandemic scenarios, early risk mitigation and severely reduced resources. Remarkably the whole process was undertaken in under two weeks, a testament to the efforts and commitment of the authors, and an example to us all of what can be achieved.

Additional international efforts are underway. Using the same methodology, an international consensus guidelines is currently being developed for surgery by the Head and Neck International Group. Other efforts are under way to prospectively collect, collate and rapidly publish data relevant to decision making for the head and neck cancer patients, so that we can address with data the questions raised above.

As with all such guidelines, these of course need to be interpreted and implemented locally, as conditions differ from region to region, country to country and hospital to hospital. Even in the same hospital, the situation is changing on a weekly and sometimes daily basis.

But, now is the time to rally our extraordinary worldwide community of head and neck cancer practitioners. Together, we can get through this crisis with thoughtful guidelines such as these. And never has there been more need than in these ‘unprecedented’ times!

Stay well.

Reference

1. Reference to the Guidelines by Thomson and Yom