An Ethical Framework for Head and Neck Cancer Care Impacted by COVID-19

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Abstract

The COVID-19 pandemic has upended head and neck cancer care delivery in ways unforeseen and unprecedented. Its impact parallels other fields in oncology, but is disproportionate due to limitations on potentially aerosolizing procedures and related interventions specific to the upper aerodigestive tract. The moral and professional dimensions of providing ethically appropriate and consistent care for our patients in the COVID-19 crisis are condensed herein for head and neck oncology providers.

Introduction

The COVID-19 pandemic continues to evolve and commandeer all aspects of clinical management. The impact upon head and neck oncologic care might lead to delayed diagnoses, treatment, and surveillance in a manner that threatens outcomes and survival for untold patients. How this will directly influence multidisciplinary care in widely divergent settings remains unknown and uncharted. Head and neck cancer providers will be constrained in their ability to provide vulnerable patients with the attention and care they require, and will likely experience moral distress when routine management is all but impossible. This article is designed to provide a guide to the ethics inherent to care delivery in the current COVID-19 era.

One of the major challenges specific to head and neck cancer involves the significant risk associated with examination, biopsy and treatment of pathology arising in the upper aerodigestive tract. Potential aerosolization of the SARS-CoA-2 virions hinders our ability to conduct routine management and requires extra resources and time to perform what-before-were routine examinations, endoscopy, biopsy, and surgery. Recent publications echo and reinforce the related dimensions of infection control, safety, and resource stewardship.⁴

Airway management represents a discrete consideration in routine, urgent, and emergent settings, and newly published guides are also instructive.⁵ All of these reaffirm the importance of protecting patients as well as clinical staff from inadvertent exposure. Indeed, protection of the clinical workforce is a fundamental ethical and professional responsibility.

The American Academy of Otolaryngology – Head & Neck Surgery Foundation's related position statement affirms the need to avoid all clinical interactions which are not urgent/emergent, but "recognizes that 'time sensitivity' and 'urgency' are determined by individual physician judgment and must always take into account each individual patient's

medical condition, social circumstances, and needs." Other societies have resources and guidance that are also informative. The American College of Surgeons' dedicated website clarifies the importance of delaying/deferring non-essential operations, and offers comprehensive support, including patient-facing messages which may be valuable to head and neck surgical oncology practices. The Society for Surgical Oncology recommends that "urgent procedures... should be carefully considered for delay on a case-by case basis... and diagnoses which have equivalent results with radiation therapy and surgery should be considered for radiation therapy." The American Society of Clinical Oncology has general guidance for cancer providers and patients to avoid in-person encounters whenever possible, but the organization does not offer guidance specific to management of specific cancers.

Individual vs. Population Interests

It is clear that we need to collectively limit encounters, and do our part to flatten the epidemiological curve to protect our collective patient populations, providers and society atlarge. Demonstrably worsened clinical outcomes among patients with cancer who contract COVID-19 underscore this risk. ¹⁰ We also know that delaying head and neck cancer evaluation and management will undoubtedly impact oncologic outcomes, and patients and providers alike will bristle when facing such postponements.

The principles of medical ethics, broadly speaking, require us to consider patient preference, maximizing benefit, minimizing harm, and being deliberative and fair. ¹¹ The challenge of the current COVID-19 pandemic is that honoring these principles as resources become scarce or non-existent will lead to intrinsic conflict. There will be instances when we cannot grant specific individual requests or focus on a specific patient's needs in a manner that supersedes the need to protect populations and to conserve resources necessary for others. This

highlights the tension between "clinical ethics" and "public health ethics." The former, which is familiar to most clinicians, focuses on the primacy of the doctor-patient relationship in formulating evidence-based and individualized treatment paradigms designed to maximize the best outcome for a specific patient. In contrast, public health ethics concentrates on the needs and interests of populations, even if that might negatively impact specific individuals. Such a paradigm shift might be difficult for head and neck cancer providers to accept, and explains the intense challenges facing us all.

Our community will need to discern when the needs of populations outweigh the needs of individuals, potentially leading to treatment delays or non-standard treatment paradigms. Since surgical manipulation of the upper aerodigestive tract now poses new costs and risks, the weighting of treatment choices will change. Specifically, when non-surgical modalities are superior to surgery, the choice is easy. In cases in which these choices are either neutral or preference-sensitive, non-surgical approaches should be recommended. However, for conditions in which surgery is clearly preferred or is the sole option, proceeding with an operation might carry considerably more risks and tradeoffs than in the pre-COVID-19 era. This is not to state that such tradeoffs cannot be justified, but rather than clinicians will need to recognize that choices for individual patients will be made based upon the needs of others in ways we do not normally consider. Complicating the situation, we will also need to factor in the finite availability of non-surgical resources and the limited availability of skilled personnel necessary to deliver the selected care safely and appropriately.

This does not obviate our ethical responsibility to our patients, though. Even though we might not be able to provide the same level of care or be able to see patients face-to-face, this does not prevent us from maintaining productive doctor-patient relationships. Patients and

survivors are often intensely vulnerable and they deserve support, counseling and reassurance for cancer control and symptom management as much as ever. Utilization of virtual care can be invaluable to counsel our patients and ensure they do not feel abandoned.¹³

Consistency as an Ethical Tenet

The multidisciplinary nature of head and neck cancer care is both an advantage and vulnerability in the COVID-19 era. Multiple treatment paradigms and the networks of clinicians create systemic redundancy and options, all of which are welcome. However, this also can create conflicting, disparate perspectives and approaches, both at societal/national levels and for individual care teams.

Major ethical concerns arise when dissimilar treatment approaches are offered to similar groups in different locations. Even if a provider or group is consistent in their practice and treatment paradigms for a specific, discrete population of patients, other providers might employ consistent but fundamentally different approaches, thus creating different care paradigms that violate ethical principles of justice and fairness.

The solution to this dilemma is to ensure consistent evidence-based approaches as best as possible. At the institutional level, this requires providers to collaborate and consider how best to maintain care paradigms. For example, it would be inappropriate for individual surgeons to decide to operate on all oropharyngeal cancers without proactively unifying the broad approach with radiation and medical oncology colleagues, whether they are part of the same institution or part of a broader referral network. Individual patients can and should still be discussed in virtual or face-to-face tumor boards, but this does not replace a more cogent and cohesive approach to disease management.

Limited capacity for treatment (regardless of modality) will also impact decisions. Scarce resource allocation with regard to ventilators and ICU beds for patients with COVID-19 is in the spotlight, but the principles similarly apply to cancer care resources if and when they are also insufficient. The selection of ablative and reconstructive procedures that avoid the use of ICU beds is an example. In short, this requires explicit, consistent, evidence-based and objective standards, transparency, and involvement of all necessary stakeholders. Such protocols must responsibly utilize and preserve vital resources, and to frame treatment that aligns as much as possible with current best practice.

Some populations have been victims of cultural, racial, and economic discrimination for generations and societal stress points such as pandemics can worsen both explicit and implicit biases.¹⁵ Health care providers must deliberately partner with underrepresented groups to assure that the risks of care disparities are minimized even in the face of crisis.

Clinical Research

Clinical research trials in the era of COVID-19 can continue in some instances and ethical guidance is available. ¹⁶ Trials can be stratified into whether they are likely to produce either certain, potential, or no benefit to the participants, and by how these options would compare with clinical care off-trial. Trials with a high likelihood of benefit should proceed although they may need modification after consideration of the added burdens, risks, and trial-specific testing and face-to-face interactions. For trials without clear benefits to the participant, continued enrollment into the trial is viewed in the context of the potential for generalizable knowledge afforded by the data generated. For head & neck cancer specifically – in everything from investigator-initiated to cooperative trials – risks, benefits and tradeoffs should be assessed,

knowing that every intervention and instrumentation of the upper aerodigestive tract poses a risk to patients, subjects, and providers alike.

Regulatory and funding agencies have provided resources to assist. NCI has issued specific guidance for federally funded cancer trials,¹⁷ and NIH has broader resources available for clinical researchers.¹⁸ In addition, specific FDA guidance will be of value for those trials involving their regulatory oversight.¹⁹

Conclusion

In summary, COVID-19 threatens the very essence of head and neck cancer care delivery and puts both patients and providers at significant risk for foreseen and unforeseen complications and death. This creates a significant and previously unknown barrier to care that must be acknowledged and addressed as an ethical challenge, both as we care for individuals and fulfill our responsibilities to society. The importance of open and honest communication, consistent multidisciplinary planning and messaging, and adoption of novel paradigms will be essential.

The practice of head and neck oncology has always been shaped by disease factors and the complex context in which our patients require care. Collectively, our community can and will meet these new travails with the alacrity, creativity and commitment for which we pride ourselves.

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