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Head and neck virtual medicine in a pandemic era: **Lessons from COVID-19**

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Abstract

The 2019 novel coronavirus disease (COVID-19) has presented the world and physicians with a unique public health challenge. In light of its high transmissibility and large burden on the health care system, many hospitals and practices have opted to cancel elective surgeries in order to mobilize resources, ration personal protective equipment and guard patients from the virus. Head and neck cancer physicians are particularly affected by these changes given their scope of practice, complex patient population, and interventional focus. In this viewpoint, we discuss some of the many challenges faced by head and neck surgeons in this climate. Additionally, we outline the utility of telemedicine as a potential strategy for allowing physicians to maintain an effective continuum of care.

KEYWORDS

COVID-19, head and neck oncology, health systems, patient-physician communication, telemedicine

1 VIEWPOINT

The recent SARS-CoV-2 outbreak has placed many physicians in a newfound struggle as they try to grapple with appropriate patient care, their own safety, and societal welfare. A balance must be struck between providing chronically ill patients the necessary follow-up and minimizing person-to-person contact as recommended by government officials and public health experts. As such, many hospitals and medical practices across the country have made a call to cancel or delay "elective surgical procedures" and unnecessary clinical appointments in order to mobilize resources for the response to COVID-19. Many physicians across the country have had the task to decide which patients should be triaged to have surgery at a later time vs continuing on with higher-acuity cases as planned. Additionally, physicians among a variety of specialties and settings have been told to work remotely from home given the current climate of social distancing.

In this context, head and neck cancer surgeons have been placed in a particularly difficult scenario. Head and

neck cancer surgeons, like physicians in other specialties, cannot easily work from home given the disease they treat. Head and neck cancers are not monolithic diseases that can be fully managed empirically; rather, they consist of a constellation of several conditions which can have variable symptoms and responses to therapy. Furthermore, most institutions rely on multidisciplinary head and neck tumor conferences with numerous specialists to formulate the optimal treatment plans for patients. Thus, it can be difficult for head and neck cancer surgeons to appropriately triage patients remotely. The American College of Surgeons has already issued broad guidance for physicians on managing these issues but acknowledges the struggles surgeons may face in defining medical urgency. Some malignant head and neck cancers in particular are often rapidly progressive in the absence of therapy. If proper treatments are not carried out, disease burden may increase to a critical point requiring emergent intervention, thus increasing health care system burden in the long run.

Furthermore, head and neck cancer surgeons have the additional responsibility of oncologic surveillance

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and postoperative evaluations in their clinic, making it difficult to choose which patients can safely delay their appointments. Oncologic follow up typically includes discussion of new symptoms and surveillance imaging, clinical examination, and management of potential recurrences or new primary tumors. Postoperative appointments tend to involve evaluation of surgical sites, discussion of pathology, and planning next steps in therapy. Head and neck surgery can have debilitating acute effects on patients' lives, often requiring clinical guidance. Many patients have challenges with managing surgical wounds, infections, and tracheostomies, dysarthria, and dysphagia requiring temporary feeding tubes, physical limitations such as neck immobility, and concerns regarding disfigurement. In the profound and unique context of social distancing and the COVID-19 pandemic, these acute effects can not only impact patient health, but also perhaps increase the psychological impact of their disease, recovery, and quarantine.

The management of patients with head and neck cancers is complex and outcomes are improved with the collaborative efforts of various team members including radiation oncologists, medical oncologists, speech therapists, nutritionists, physical therapists, and social workers. In the current pandemic, head and neck surgeons may be tasked with serving as the team "quarterback" to coordinate care and provide guidance beyond their typical roles. Head and neck cancer surgeons need strategies for guiding their patients through crucial clinical decisions which may impact long-term survival and quality of life while avoiding the risk of spreading COVID-19.

There is no simple answer to these complex clinical issues in the rapidly changing medical environment. However, one strategy that has been promising for head and neck surgeons over the past weeks has been the use of telemedicine. Broadly speaking, telemedicine refers to the use of technology to assist in the remote care of patients. Telemedicine may include a variety of domains, including patient education, diagnosis, and treatment. Such services have been specifically proposed for disaster scenarios, but it has been noted that implementation of telemedicine has been severely underutilized, even in such rare circumstances.² In the current pandemic, telehealth services have grown in popularity and have been adopted by care teams in order to optimize workflow.3 The federal government has followed suit with this trend by expanding telehealth service reimbursement for Medicare patients effective March 6.

In light of these developments, head and neck surgeons should also leverage this technology to assist in patient management. Utilizing virtual visits for postoperative patients and some oncologic surveillance patients

has been a good option to navigate care in the current pandemic. The American Academy for Otolaryngology— Head and Neck Surgery has begun to provide broad guidelines to aid practitioners in implementing such practices.⁴ In the authors' experience, patients have been very open to these avenues of care and have been grateful that physicians have taken initiative in uncertain times. Virtual visits allow patients the opportunity to be evaluated and be heard by their physician. Pathology and imaging can be discussed with appropriate opportunities for questions. Surgical sites can even be assessed to some degree with the use of video conferencing and/or photographs. Following a detailed history, surgeons can paint a more accurate picture of the patient's acuity to assist in triage. Tumor board conferences can also be conducted virtually to allow for collaborative input without unnecessary exposure between providers.

It is difficult for head and neck cancer surgeons to develop clear guidelines as to which procedures are emergent vs which are not, and which patients must be seen in person for further workup vs which can be monitored virtually. While many patients may agree with delaying procedures, many others will not, and it remains a delicate balance for physicians to navigate. Ultimately, the onus is on surgeons to be proactive and have detailed conversations with their patients in the climate of COVID-19, and oftentimes this can be accomplished through avenues not often utilized by the field including telemedicine.

CONFLICT OF INTEREST

The authors declare no potential conflict of interest.

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How to cite this article: Prasad A, Carey RM, Rajasekaran K. Head and neck virtual medicine in a pandemic era: Lessons from COVID-19. *Head & Neck*. 2020;42:1308–1309. https://doi.org/10.1002/hed.26174