The Surgeon's Role During the Coronavirus Pandemic

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Abstract

The coronavirus pandemic has disrupted delivery of healthcare globally, forcing healthcare providers at all levels to adjust their methods of care. Surgeons in the community must respond accordingly and not only take necessary precautions during patient management, but also find opportunities to better educate patients moving forward. Additionally, to best preserve personal protective equipment and staffing resources, surgeons should thoroughly assess their patient load and determine which planned surgeries can be safely delayed to a later date. While not necessarily on the front lines of the pandemic response, surgeons have a vital role in maintaining the public health in the time of crisis.

As the coronavirus (COVID-19) pandemic continues to strain healthcare systems globally, hospitals and healthcare providers at all levels are adjusting their practices accordingly. As the personnel on the frontline of patient care, physicians must be especially aware of national, local, and hospital-specific guidelines regarding appropriate precautionary and treatment measures. In this article, we describe the surgeon's responsibility during the COVID-19 pandemic.

Because the virus' spread has been so highly associated with asymptomatic individuals, surgeons must treat every patient with due diligence.¹ A key consideration is biological exposure for those in the operating room. As coronaviruses are spread by airborne droplets, the inherent proximity of surgery places surgeons at an increased risk for exposure to COVID-19, which makes proper protective measures of the utmost importance, especially during aerosol-generating procedures in the nasopharyngeal and craniofacial spaces. The American College of Surgeons recently released recommendations for those involved in surgical care to follow the guidelines established by the Centers for Disease Control (CDC).^{2,3} These recommendations include the use of personal protective equipment, such as N95 respirator masks, eyewear, and gloves. Additionally, surgeons must also display high acuity for concerning features of patient history and physical exam, including recent international travel and infectious and respiratory symptoms. Over the course of surgical management, routine sanitization standards are appropriate.¹ In the interest of public health, surgeons are further obligated to inform patients, particularly the elderly and/or immunosuppressed, about community resources available for testing and management of COVID-19, along with the importance of social distancing and its importance to flattening the curve and relieving public healthcare burden.

Given the CDC's advice to restrict non-essential procedures at this time in an effort to preserve rapidly depleting resources, surgeons must now also determine whether previously scheduled surgeries can be delayed.¹ To effectively make these determinations, surgeons must holistically evaluate each patient on a case-by-case basis, considering the degree to which delayed surgical intervention will alter each patient's prognosis, and prioritizing acute and severe cases. Each surgical candidate also requires a thoroughly planned postoperative treatment course that incorporates the likelihood for complications, potentially having to treat the patient with depleting resources, and the limited ability for caregivers to assist in recovery given current social distancing recommendations.^{2,4} Postoperative assessment can also be conducted through telemedicine modalities, allowing surgeons a convenient method to deliver medical information and determine each patient's individual needs during follow-up care. Conversely, operations deemed safe to postpone should be done so, with a currently estimated delay of at least six to eight weeks.⁵

Surgical teams should also be in communication with hospital administration to gauge their hospital's evolving surgical capacity. Surgeons should prioritize the demands of front-line staff such as emergency room physicians and hospitalists and aim to meet their needs whenever possible. Centers with a substantial volume of elective procedures, such as bariatric surgery and aesthetic plastic surgery practices, must also consider potential economic loss during this time. However, these facilities, along with various ambulatory surgical sites, should prepare for the opportunity to bolster community healthcare efforts by providing their unused resources and staff to augment agencies in need.^{2,5}

While this virus is not necessarily one that can be treated surgically, surgeons nevertheless can play an important role in the delivery of quality patient care. As leaders in the healthcare field, surgeons are responsible for a multitude of patients and the larger community and must behave accordingly through strategic surgical delays and interdisciplinary collaboration during this pandemic.

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