

LETTERS

High mortality is expected in patients who have COVID-19 during the postoperative period

Since coronavirus disease 2019 (COVID-19) was declared a pandemic by the World Health Organization on Mar. 11, 2020, many professional societies have recommended that elective surgeries be postponed if possible, with the goal of minimizing disease spread and maintaining health care capacity. Even so, the provision of surgery will continue to be an essential part of our health care system throughout the pandemic.¹

For patients who need surgery, what is their risk if they are infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) postoperatively? So far, little is known about the impact of COVID-19 on mortality in patients during the postoperative period. I searched PubMed for articles published up to May 13, 2020, using the search terms “novel coronavirus,” “2019-nCoV,” “COVID-19” or “SARS-CoV-2” with no language or time restriction. I found 3 articles including 19 patients who had COVID-19 perioperatively.²⁻⁴ Of the 19 patients, 11 were male (57.9%), and the mean age was 60.3 years. The operations included general, gynecologic and thoracic surgeries. Information about the timing of COVID-19 symptom onset was available in 12 patients; 9 patients (75%)

had pneumonia symptoms within 7 days after surgery and the other 3 had symptoms more than 7 days after surgery. The case fatality rate was 36.8% (7/19).

These data suggest that patients infected with SARS-CoV-2 in the perioperative period have a high risk of death, although there may be a bias to report more severe cases. It is widely believed that the fatality of COVID-19 in the general population is less than 5%, but older age and comorbidities are indicators of poor prognosis.⁵ Data here suggest that postoperative patients may be another group who have a poor prognosis with COVID-19.

The median incubation period of SARS-CoV-2 has been reported to be 4 days, with a range of about 2–7 days.⁶ The fact that pneumonia symptoms developed in 75% of the patients within 7 days after surgery means that most of the infections may have occurred before surgery. These surgeries could have been delayed safely if SARS-CoV-2 infection had been detected before the operations. Because no vaccine or effective antiviral treatments are available, prevention is the best way to reduce the impact of COVID-19. Preoperative intensive surveillance for SARS-CoV-2 infection must be done during the pandemic. To avoid nosocomial transmission of the virus, strict isolation and protection measures should be implemented. Visitor policies should be updated simultaneously;

each patient should have only 1 visitor at a time. Finally, our surgical communities should adapt to the unprecedented worldwide public health crisis to develop a COVID-19-specific approach to providing the very best care to our patients during the pandemic.

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