Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Commentary: SARS-CoV-2 and Esophagectomy for Esophageal Cancer: Timely Operations and Good Outcomes

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Central Message

Esophagectomy for esophageal cancer could be safely performed during the COVID pandemic. Carefully implemented precautionary protocols aid in achieving good outcomes.

The novel coronavirus SARS-CoV-2, commonly known as COVID-19, presented a challenge for all medical professionals. Many hospitals and health systems were overwhelmed with sick infected patients. Lack of protective equipment and fully occupied emergency rooms and intensive care units caused a delay in treating other conditions, often with deleterious effects on patients' health. Another important issue during the pandemic was the unknown consequence of COVID-19 infection in the perioperative period. Small studies in cardiothoracic surgery suggest high mortality in patients infected with the novel virus. A small study in cardiac surgery patients had a mortality of 15% among patients who had cardiac surgery and acquired COVID-19.[1] Mortality in patients undergoing lung cancer surgery appears even higher at 27%.[2] There is little available data on esophagectomy performed during the COVID 19 pandemic. A recent European study that compared 139 patients who had esophagectomy during the pandemic to 168 operated before the pandemic did not show differences between the 2 cohorts.[3] Curiously, none of the esophageal cancer patients was infected with the novel pathogen.

In the present issue of the Seminars, Dolan et al.[4] report on their esophagectomy experience during the early days of the global pandemic. They compared consecutive patients operated on before the pandemic (n = 96) to patients operated on between March and June of 2020 (n = 37). The authors and their institution used a protocol mandating patients to be tested for COVID-19 72 hours before surgery and to self-quarantine from the time of testing to the time of surgery. Patients were also tested every 3 days while in the hospital. There were no significant differences between the 2 groups, except for larger tumors in the COVID group, a finding of unknown significance. Postoperative results were also similar, with no increase in complications or death. Notably, there was no delay in treatment in patients operated on during the pandemic. Like in the study by Borgstein,[3] there were no infections in the group operated on during the pandemic.

Dolan et al.[4] have relatively few patients, but confirm the findings of Borgstein's larger study.[3] With the implementation of careful protocols, esophagectomy can be safely performed during a pandemic. It is interesting to note the decrease in the length of stay during the pandemic. Although this may reflect a type I statistical error, I believe it is related to better protocols for home discharge. During the pandemic, we all tried to get our patients home as soon as possible to avoid contamination with COVID in

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the hospital. The decrease in length of stay suggests that there is always opportunity to improve efficiency and improve early discharge protocols. The data presented also indicates that centers that completely shut down their operating rooms during the pandemic could have taken a different path to deal with complex cancer surgeries and COVID.

Dolan's work comes from a high-volume center with excellent support services. Clinicians should carefully consider if protocols in place at their hospital and the support services provided are adequate to care for complex postoperative cases during a major pandemic.

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