Emergency Surgery During COVID-19 Pandemic; What Has Changed in Practice?

Editor

COVID-19 has spread all over the world and has caused dramatic changes in healthcare practices. As such, various medical professional societies have published new guidelines on the management of non-COVID-19 disorders[1]. Accordingly, surgeons in many healthcare facilities have postponed elective procedures but continued to operate on emergency surgical and cancer cases. Surgical procedures have also been a subject of various modifications during this period[2-4]. Whereas very emergency and emergency cases have been operated on immediately, semi-emergency cases have been operated on only after evalution and approve of triage committees.

Most of the published literature on emergency surgery during the pandemic consists of reviews, expert recommendations, and guidelines; very few studies have yet reported the outcomes of altered clinical practices. In this report, we aimed to report the outcomes of emergency cases managed at our clinic during the pandemic. After the first case was diagnosed in Turkey, emergency surgical procedures between March 10, 2020, and May 9, 2020 were evaluated. In this context, preoperative and postoperative COVID-19 symptoms, COVID-19 test results, hospitalizations, and postoperative complications were documented.

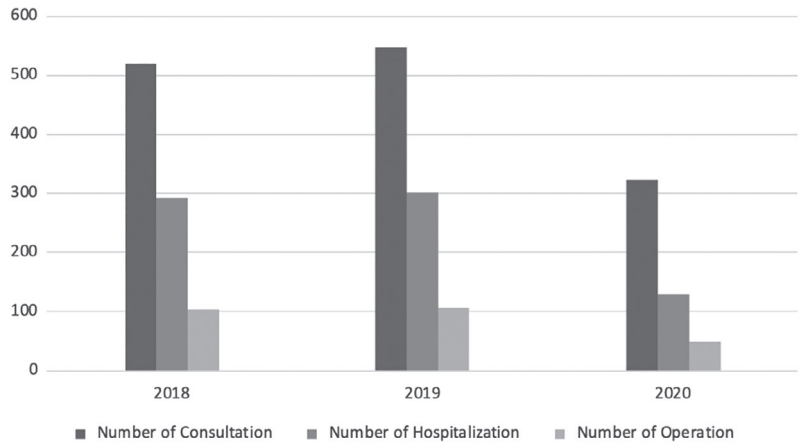
Among 321 emergency surgical cases consultation, 129 were admitted to hospital. Forty-nine patients (38%) were operated on an emergency basis, while 80 patients (62%) were conservatively managed. Of operated patients, 32 (65·3%) were male and 17 (34·7%) were female. The mean age was 47·7 ± 18·7 years. Twenty-seven open (55·1%) and 22 (44·9%) laparoscopic surgery were performed. Twenty-five patients were operated for acute appendicitis; six for mechanical intestinal obstruction; four for acute cholecystitis; four for incarcerated hernia; four for peptic ulcer perforation; one for an obstructive gastric tumor; and five patients for other diagnoses. During the follow-up period, 4 patients (8·2%) suffered complications, of which two were surgical site infections, one was an intestinal fistula, and one was a cerebrovascular accident.

Only one patient underwent COVID-19 testing prior to surgery and three after surgery. One patient, who underwent conventional appendectomy had COVID-19 symptoms prior to surgery. The surgical procedure was performed with the suggested precautions before the test result, and the test resulted negative. During the postoperative follow-up, three patients developed COVID-19 symptoms; two of them tested negative, and one patient underwent surgery for incarcerated hernia tested positive after 19 days of surgery.

Number of consultations, hospitalization rates and operations have been dramatically decreased period of during pandemic comparing the same 2018 and 2019 in our clinic (*Fig. 1*). Emergency conditions that cause intra-abdominal sepsis are as fatal as COVID-19, and thus in order to reduce mortality rates associated with non-COVID-19 conditions, it is crucially important to inform people not to refrain from presenting to hospitals for emergency conditions.

This report indicates that the number of emergency department presentations, hospital admissions, and surgical procedures have declined during the pandemic. Patients avoiding hospitals with true emergencies may increase the rates of long-term complications and overall mortality. During the pandemic, emergency surgical procedures can be safely performed by taking the necessary measures and by paying attention to personal protective equipment use.

Fig. 1 The number of emergency consultation, hospitalization and operation performed between 10 March to 9 May by years



Orhan Alimoglu, Cem Ilgin Erol, Abdullah Kayali, Mehmet Acar, Nuray Colapkulu, Metin Leblebici and Ozgur Ekinci

Department of General Surgery, Istanbul Medeniyet University, Faculty of Medicine, Goztepe Training and Research Hospital, Istanbul, Turkey

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