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CORRESPONDENCE

Decline in general surgery emergencies during COVID-19 pandemic. Has its severity increased? Analysis in a large volume hospital in Europe[☆]



Keywords COVID-19; Emergency surgery; General surgery; Pandemic

To the Editor,

The volume of patients visiting surgical emergency departments has decreased more than 50% during COVID-19 epidemic in many countries. Public health systems and centers for disease control worldwide have adapted their protocols and recommendations to try to minimize the burdens of this pandemic. The Government of Spain, by the Royal Decree 463/2020 published on March 14th, declared the state of alarm for the management of the health crisis caused by COVID-19 [1]. With this decree, measures limiting people's freedom of movement were established, as well as measures aimed at strengthening the Spanish National Health System. In the case of the SARS-CoV epidemic, literature reflects a decrease in overall emergency care that was attributed to fear of contracting SARS during the hospital stay. Taking into account the published literature between the 2003 SARS-CoV epidemic and the current global pandemic [2–5], we suspected that patients with digestive surgical emergencies were coming later to the emergency department because of fear of contracting COVID-19, leading to increased morbidity and mortality.

Our aim was to analyze the activity in Vall d'Hebron University Hospital (VHUH) General Surgery Emergencies from March 1st to April 12th 2020, comparing it with the same period of the previous year (2019). Any patient admitted in the General Surgery emergency department from March 1st to April 12th 2020 (COVID-19 period) was compared with March 1st to April 12th 2019 (control period). During COVID-19 period, patients visiting the emergency department were not referred to other hospitals. Real-Time Polymerase Chain

Reaction (RT-PCR) for SARS-COV-2 was performed for all patients before hospitalization and if symptoms of SARS-COV-2 appeared during the hospitalization it was repeated. This study was approved by the Research Ethical Committee from VHUH. The number of patients who visited emergency department decreased a 56.75% comparing both periods. Only 461 patients were admitted during the COVID-19 period compared with 1066 patients during the control period (Fig. 1). We hospitalized a total of 304 patients, 199 (65.6%) during 2019 period and 105 (35.4%) during COVID-19 period. Hospitalization rates were similar in both periods (18.7% vs. 22.8% [$P=0.07$]). Patients' characteristics, including gender, age and ASA classification, and Charlson Comorbidity Index were similar between groups. No statistically significant differences were found regarding diagnosis, duration of symptoms or type of treatment received (including medical vs surgical, and also open vs laparoscopic approach). No significant differences were found either when analyzing length of hospital stay, nor thirty-day readmissions and mortality. A total of 8 patients were RT-PCR COVID-19 positive. In the present analysis, the type of treatment received and the comprehensive complication index were not affected by the COVID-19 pandemic. Since the start of the outbreak in Spain, the impression on call surgeons was that patients consulted later than usual, leading to worse treatment outcomes. Notwithstanding, results obtained from our study do not support this data. However, we need to take into account that the low incidence of SARS-CoV-2 pre- and postoperative infection in our study may be related to the absence of differences in postoperative complications between both periods. It is difficult to understand the reasons why these patients did not go to the emergency room during the COVID-19 period, although it seems logical that a change in social behavior due to fear of contracting the disease during the hospital stay or even during the journey between home and hospital could be one of the main reasons, as it has been previously stated. It would be interesting to analyze, in view of possible future situations of exceptional circumstances, the changes in emergency care attendance and the reasons that lead patients to avoid consulting.

Abbreviations: RT-PCR, Real-Time Polymerase Chain Reaction; VHUH, Vall d'Hebron University Hospital.

[☆] Previous communication: this paper has not been previously presented to any societies or meetings.

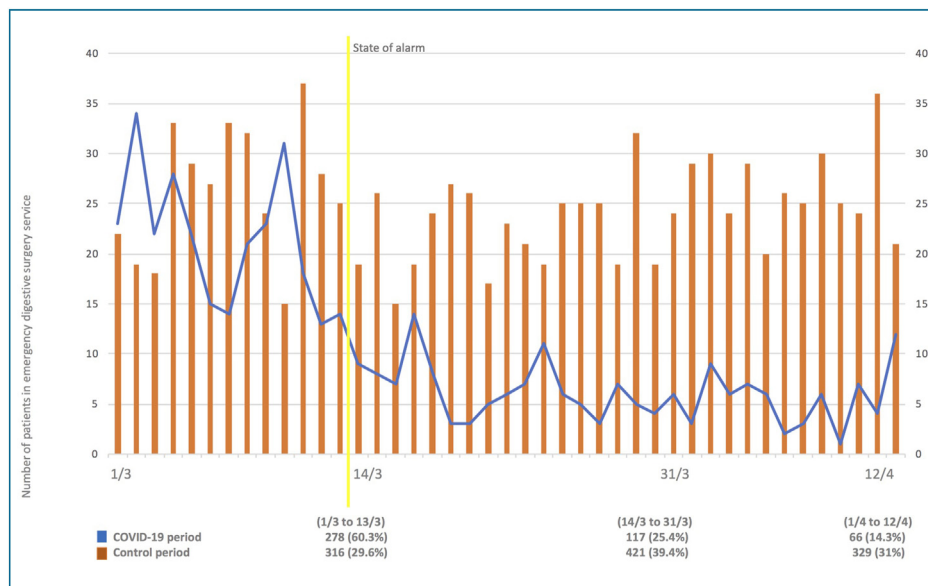


Figure 1. The number of patients in emergency digestive surgery service in both periods.

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Disclosure of interest

The authors declare that they have no competing interest.

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