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Author response to: Comment on: Patterns of acute surgical inflammatory processes presentation of in the COVID-19 outbreak (PIACO Study): surgery may be the best treatment option

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Dear Editor

We are thankful to Tur-Martinez *et al.* and Madrazo *et al.* for their interest in our article[1]. We are grateful for their comments, which we have read carefully.

The PIACO study[1] took place during the most challenging time of the COVID-19 outbreak in Spain, in a region with high population concentration. Data were collected by centres covering 66.6 per cent of the Community of Madrid with (6.7 million inhabitants), one of the most severely affected regions worldwide during the pandemic. A centre in Seville also contributed data.

The primary aim was to assess the altered patterns of presentation and treatment of acute surgical inflammatory processes during the COVID-19 pandemic, compared with the same time frame a year before. As such, our sample size was 1343. As a secondary outcome, we assessed the effect of a COVID-19-positive result on type of treatment employed and patient outcomes.

Our study design was described adequately as a comparative study with historical controls, and hence any results should be interpreted in this context. Although the number of COVID-19-positive patients was limited, our analysis was not focused on or limited to the 37 positive patients. These patients were included among the 345 patients tested, which is a reasonable number. However, we do acknowledge that the inequality in patient numbers in the two groups, as well as the study design, should be taken into consideration when interpreting the results. The authors would like to make this point absolutely clear.

In regards to the increased rate of complications in the COVID-19-positive group, as it is described in the third paragraph of the research letter, although at first glance it appears that COVID-19-positive patients had a greater number of severe complications, logistic regression showed this to be associated with patient co-morbidities (Charlson Co-morbidity Index) and severity at the time of presentation rather than COVID-19-positive status.

Among the COVID-19-positive group, 26 were diagnosed before surgical treatment, and 15 were symptomatic with pneumonia. Only seven of them presented serious complications, although COVID was involved in only one.

Among patients with serious complications, the cause of these complications was the evolution of the acute surgical inflammatory process itself in 17, a postoperative complication in 11, an intercurrent process in four and, in the previously mentioned patient, the COVID-19 infection (a 87-year-old patient who died in the context of a bilateral pneumonia 22 days after admission, with synchronous cholecystitis treated with cholecystostomy).

Overall, the aim of the PIACO study was to present a snapshot of the presentation patterns and treatment of common acute surgical pathologies during the peak of the COVID-19 pandemic in Spain. The authors do not claim it to be, and it should not be regarded as, a consensus/recommendation for treatment.

However, it does have a reasonable overall sample size and findings that should be evaluated with further research. We are in the process of acquiring a larger sample size to further investigate our initial results.

Finally, it would be of interest to hear from your readership whether their surgical units have reverted to treating acute surgical pathologies in the same manner as before the pandemic, or whether their practice remains modified.

Disclosure. The authors declare no conflict of interest.

Reference

1. Guadalajara H, Muñoz de Nova JL, Fernandez Gonzalez S, Yiasemidou M, Recarte Rico M, Juez LD et al. Patterns of acute surgical inflammatory processes presentation of in the COVID-19 outbreak (PIACO Study): surgery may be the best treatment option. Br J Surg 2020;**107**:e494–e495