

Re: Revision for WJG56293-: *COVID-19 Outbreak and Surgical Practice: The Rational for Suspending Non-Urgent Surgeries and Role of Testing Modalities*

Dear reviewers and editors,

We would like to thank you for the opportunity to revise the manuscript in response to the reviewers' comment and editorial board suggestions. We wish to thank the reviewers for thoughtful comments and have incorporated the suggested revisions in the manuscript. The final copy of the revised manuscript with requested changes is enclosed. Below, we have addressed the comments and questions individually. Additionally we altered the format of the citations and references to meet your formatting standards and addressed the requested changes made by editorial board.

Respectfully yours,

Andrew D. Grubic DO, Shahin Ayazi MD, Javad Zebarjadi MD, Hamed Tahmasbi MD, Khosro Ayazi MD, and Blair A. Jobe MD

### **Narrative**

This paper is an extremely well-written and informative piece about surgical advice when dealing with COVID-19 outbreaks and testing utility and limitations. I strongly recommend publication as soon as **minor revisions** are addressed.

Please see specific suggestions and comments below:

### **Abstract**

Very well written.

*EDIT: Thank you, no changes were made.*

### **Core Tips**

The core tips are well written; however, you might want to add a key finding or two.

*EDIT: Key testing findings were added.*

## **Introduction**

Page 3 - Please cite Desjardins et al. (2020) in your introduction after “With the arrival of coronavirus disease 2019 (COVID-19) in the United States (Desjardins et al. 2020). See below for full citation.

Desjardins, M. R., Hohl, A., & Delmelle, E. M. (2020). Rapid surveillance of COVID-19 in the United States using a prospective space-time scan statistic: Detecting and evaluating emerging clusters. *Applied Geography*, 102202.

Page 3 – where are the 3 health systems located? Also, the proper abbreviation for the United States is U.S. Please fix throughout paper.

*EDIT: The requested citation was added. We also added a paragraph addressing the epidemiological rationale as requested by reviewer, which is eventually tied in at the conclusion. The 3 institutions named in the reference performing elective cases at the time were University of Pittsburgh Medical Center, Virginia Hospital Center (Arlington) and Jackson Memorial Hospital (Miami). There was also some report of UC Davis in our search. Ultimately we chose to forego naming specific institutions in this section to avoid any political manifestations.*

## **Case**

“the highly suggestive presentation in the setting of a growing pandemic with no other identifiable etiology questions the reliability of this test” – Great point and well-written section, overall.

*EDIT: No changes*

## **Discussion**

Page 5 – “There number of cases worldwide is now approaching” – now will change when the paper is published and when someone will read this. Please add specific dates when you provide estimates of COVID-19 cases and deaths.

*EDIT: Wording was altered to address the evolution of the number of cases*

## **Modes of transmission**

I would add  $r_0$  and survival time of SARS-CoV-2 on different surfaces for reference.

*EDIT: Minor grammatical changes. While we are aware of more recent invitro studies looking at viral stability on various surfaces, we elected to leave this section unchanged for simplicity and to avoid altering the content.*

### **Quandary of incubation period**

Page 7- “The incubation period for COVID-19 is typically between 2-14 days” – missing citation.

*EDIT: Citation was added.*

### **Available diagnostic tests and their limitations**

Very well written and informative. No comments.

*EDIT: No changes*

### **Surgical team and operating room safety**

Page 10, first paragraph – need a space between whom and 14.8%

Page 10 - “Of Italian physicians treating COVID-19 patients, 50 have died of the disease and this list continues to grow” – missing citation.

Page 10- “In fact, there are reports of several ENT physicians who died or developed very severe disease in China, Iran, Italy and U.K.” – missing citations.

*EDIT: Minor grammatical change, and citation was added.*

### **Anesthesia considerations**

“A minimum of a fitted, N-95 mask coupled with eye protection, cap, and standard contact protective coverings are recommended during intubation of patients with suspected or confirmed COVID-19” – there has been an obvious shortage in proper medical equipment to protect patients and providers. What if N-95 masks are unavailable or only available to a proportion of providers?

*EDIT: This was an excellent point. Supplemental commentary was added.*

### **Impact of the Surgery on the Immune system**

Page 11 – “Limited published data on COVID-19 patients who underwent urgent on non-urgent surgeries shows an unexpectedly high morbidity and mortality” – can you please provide the mortality and morbidity rates of this cohort?

*EDIT: No changes, we elected to maintain this section in its original state.*

### **Impact of restricting elective procedures during pandemic**

“Our surgical community should also be prepared for handling the high demand for surgical care during the post-outbreak period as the result of the current suspension of non-urgent care.” – This is a nice section and I wonder if you have any specific suggestions how the surgical community can be prepared for handling the high demand. It could also be possible that more severe diagnoses and outcomes could be a result due to increased waiting times and current bans on elective surgery and procedures, right?

*EDIT: We completely agree with this statement. It is intuitive to suspect that a back load of elective cases may affect outcomes. We attempted to address this by citing the experience with cardiac surgery patients in Toronto during the SARS pandemic. They found no difference in outcomes of that limited cohort. To follow this we used colorectal data from China during the SARS pandemic to show how post-pandemic volumes and wait times increased. An example of hypothetical impact was added.*

### **Recommendations of American College of Surgeons**

Very well written and informative. No comments.

*EDIT: no changes*

### **Other roles for Surgeons during outbreak**

I agree with what is stated in this section, however, the shortage has been obvious in places like New York City, where over a third of the cases and deaths of COVID-19 have been reported. Therefore, we have seen an influx of providers from across the country and even abroad to help deal with the provider shortages, burn-out, and capacity issues. Could be useful to briefly discuss this here.

*EDIT: Very insightful. The psychosocial impact of this pandemic on healthcare workers is a significant concern. A statement was added to reflect this.*

## **Conclusion**

I think that the conclusion can be stronger. This is the first mention of epidemiologic curves and models (appears in the abstract three times and in the conclusion, but not in the main body of text). You should reiterate the main findings and suggestions mentioned throughout the text, such as testing, prevention in a surgical setting, and/or impact of foregoing non-elective procedures, etc.

*EDIT: We agree that the conclusion did not completely reflect the presented content. Several statements were added and changed to draw in more content. We feel this significantly bolsters the conclusion.*