

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.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.





## **Letters to the Editor**

Regarding "Understanding the 'Scope' of the Problem: Why Laparoscopy Is Considered Safe during the COVID-19 Pandemic"



To the Editor:

We read the editorial titled "Understanding the 'Scope' of the Problem: Why Laparoscopy Is Considered Safe during the COVID-19 Pandemic," recently published in the journal, with great interest [1]. In recent weeks, anesthesiologists are at the frontline of the fight against coronavirus 2019 (COVID-19), particularly at the time of airway management. When we talk about surgery, surgeons and other operating room medical personnel are at risk of infection at the same time. Postponing all elective surgeries during the COVID-19 pandemic has become a standard of care today, but there are still many cases in which it is not possible to delay surgery. It makes sense that as much as we care about the patient, we care about the health of the staff too. Under normal circumstances, laparoscopic approaches may be of great benefit to the patient, but in a crisis caused by a respiratory infection, the situation will definitely be different. The major route of transmission of Severe Acute Respiratory Syndrome Coronavirus 2 is through respiratory droplets, and the most dangerous situation for healthcare workers is performing laryngoscopy and intubation. Therefore, avoiding general anesthesia, which requires airway management (e.g., intubation), is one of the most important ways to protect them [2,3]. Thus, local methods such as neuraxial blocks are superior to general techniques of anesthesia. Because most laparoscopic surgeries require procedures such as Trendelenburg positioning, which is best done under general anesthesia, laparoscopic approaches cannot be insisted on as much as earlier for surgeries.

On the contrary, we are at risk of the virus spreading because of the process itself. It is true that because of the restrictions on the feasibility of research, no case of virus transmission through surgical smoke plumes has been proven yet, but no research has been conducted that refutes such a possibility. The presence of the virus RNA in the stool has been proven in nearly half of the patients even after they have recovered [4]. Furthermore, the possibility of virus shedding in urine is another concern [5]. Thus, no space in the abdominopelvic cavity can be considered virus-free and importing a laparoscopic trocar to any point in this space carries the risk of spreading the virus throughout the operating room by gas insufflation. However, in the

interaction between the anesthesiologist and the surgeon, if the benefits of this technique outweigh the potential harm, laparoscopy can be performed by considering appropriate precautions, as mentioned in the article, to reduce the risk of virus transmission as much as possible.

Reza Aminnejad, MD<sup>a</sup>
Alireza Salimi, MD<sup>b</sup>
Ehsan Bastanhagh, MD<sup>c</sup>

\*\*Department of Anesthesiology and Critical Care, Qom
University of Medical Sciences, Qom, Iran,

\*\*Department of Anesthesiology and Critical Care, Shahid
Beheshti Medical University, Tehran, Iran, and

\*\*Tehran University of Medical Sciences, Tehran, Iran

## References

- Morris SN, Fader AN, Milad MP, Dionisi HJ. Understanding the "scope" of the problem: why laparoscopy is considered safe during the COVID-19 pandemic. *J Minim Invasive Gynecol*. 2020;27: 789–791.
- Cohen SL, Liu G, Abrao M, Smart N, Heniford T. Perspectives on surgery in the time of COVID-19: safety first. *J Minim Invas Gynecol*. 2020;27:792–793.
- 3. Ti LK, Ang LS, Foong TW, Ng BSW. What we do when a COVID-19 patient needs an operation: operating room preparation and guidance. *Can J Anaesth*. 2020;67:756–758.
- Cheung KS, Hung IF, Chan PP, et al. Gastrointestinal manifestations of SARS-CoV-2 infection and virus load in fecal samples from the Hong Kong cohort and systematic review and meta-analysis. *Gastroenterology*. 2020;159:81–95.
- Wu ZS, Zhang ZQ, Wu S. Focus on the crosstalk between COVID-19 and urogenital systems. *J Urol*. 2020;204:7–8.

https://doi.org/10.1016/j.jmig.2020.04.030

## **Authors' Reply**

To the Editor:



Thank you for your thoughtful comments on our manuscript. We agree, and have previously stated, that the risk of transmission of severe acute respiratory syndrome coronavirus 2 is increased during aerosol-generating procedures such as intubation and extubation. We acknowledge that most laparoscopic procedures are performed under general anesthesia. In our manuscript, we recommended protecting operating room personnel with appropriate personal protective equipment to reduce the risk