

Letter to the Editor

Safety Considerations of Laparoscopic Surgeries for Anesthesiologists During COVID-19 Pandemic?

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Dear Editor

By overcoming the peak of the coronavirus disease 2019 (COVID-19) and the need to reopen the elective operating rooms, it is necessary to pay attention to the risks that may not have been previously considered in daily practice. As the virus has been demonstrated in respiratory tract samples, in feces, blood, serum, saliva, and lymph, and it has been shown that the virus can remain for an extended time in the air due to aerosol-generating medical procedures such as intubation, laparoscopic surgery is subject to challenge to find the safest way for patients and particularly health care workers (1). Laparoscopic surgeries are so interesting for surgeons and patients due to advantages such as reduced postoperative pain, shorter hospital stay, and fewer cosmetic issues (2). Many manuscripts focus on surgical procedures and only their recommendations are about laparoscopy techniques and trocars leakage. Surprisingly, to assess the risks and benefits of this challenge there is limited evidence about the safety of the anesthesiology team while there is no warranty that asymptomatic patients are not infected, while it is clear that protecting healthcare workers is a top priority (3-5). When it is possible to do surgery with spinal

anesthesia in most gynecological procedures why we should impose high-risk procedures like intubation and extubation to anesthesiologists due to laparoscopic plans and expose all health care worker to that (3-5). Some suggestions for conducting laparoscopy in safer operating room settings during the COVID-19 outbreak are presented:

1. Laparoscopic procedures have two major added risk for health care worker, first of that is a relative necessity to the general anesthesia and intubation and second is leakage of pneumo-peritoneum beside the trocars.
2. Consider the virology test for all patient candidates for elective laparoscopic surgery.
3. If there is no time for virology testing, the laparoscopic plan should be changed to open surgery because of its added risk for the health care workers.
4. Insomuch negative virology test is not a definite way to find asymptomatic patients we recommend that in the covid19 pandemic if it is possible to do the anesthesia with a regional technique such as spinal or epidural anesthesia.

If general anesthesia is inevitable for laparoscopy, it is

recommended that the following be considered to reduce the risk:

- a. Keep the intraabdominal pressure as low as possible.
- b. Put a sign on the door of the laparoscopic room for further attention and preventing unnecessary entries.
- c. All medical personnel are involved in the laparoscopic room use PPE (Personal protective equipment).
- d. Consider the rule of minimums: minimum number of health care workers, minimum time of surgery, the minimum number of incisions, the minimum size of incisions, minimum instrument changing, minimum use of the electrocautery power.
- e. Keep the taps of trocars closed before and during surgery unless evacuation is completed.
- f. Using closed-circuit vacuum suction with a HEPA (High Efficiency Particulate Air) filter.

Conflicts of Interest

The authors declare that there are no conflicts of interest.

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