Letter to the Editor

Gynecological Surgeries During COVID-19 Pandemic: A Laparoscopist's Viewpoint

Dear Editor,

COVID-19 is the recent global threat to humankind caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). In pre-COVID era, laparoscopy was the preferred route of surgery for most of the gynecological indications. Whereas, in the current scenario, it has been postulated to avoid laparoscopy because of the theoretical risk of aerosolization of virus through pneumoperitoneum and surgical smoke.[1] The aim of this report is to identify the optimum route of gynecological surgeries in times of COVID-19 which is safe for health-care workers and results in a better patient outcome.

There is no evidence of the presence of SARS-CoV-2 in surgical smoke, and if present, infective potential is yet to be studied. The risk is only hypothetical based on the evidences for other viruses such as HIV, hepatitis B virus (HBV), and human papillomavirus in surgical smoke.[2] Even after the presence of these viruses in surgical smoke, the incidence of transmission through pneumoperitoneum and surgical smoke is zero.[3] Moreover, laparoscopy is a preferred mode of surgery in patients infected with HIV, HBV, and hepatitis C virus as the risk of exposure of surgeons is much less. In addition, if we talk about other similar respiratory diseases in the past such as severe acute respiratory syndrome and Middle East respiratory syndrome, there was no evidence of transmission of these viruses through surgical smoke or pneumoperitoneum.[2] Therefore, it has been suggested that respiratory and blood-borne viruses should not transmit from surgical smoke and pneumoperitoneum.[4]

The risk of presence and transmission of SARS-CoV-2 via this route is merely theoretical, and advantages of laparoscopy over open route should not be disregarded because of speculations. Furthermore, advantages of laparoscopy such as early postoperative recovery, short hospital stay, and less complications will result in less exposure of health-care workers and patients than open surgery. The smoke generated in laparoscopy remains contained and can be evacuated through smoke evacuators or filtration system. While, it is not possible in open surgeries and the risk of exposure is high. Data to support the safety of open surgery are also limited. Therefore, it is not rational to adopt open surgical approach for all gynecological cases. This is further supported by various international societies of gynecology and endoscopy who recommend laparoscopic surgery over open surgery wherever feasible.[5-10] Laparoscopy should be avoided in gynecological cases with a suspicion of bowel involvement.[11]

Hysteroscopy is an integral part of gynecological endoscopy. There are no data available for hysteroscopy and its safety in COVID era. Considering the fact that SARS-CoV-2 is not documented in the female genital tract, and general anesthesia is not necessary, hysteroscopy appears to be safe. Operative hysteroscopy is also associated with low risk as the use of electrosurgery produces very less smoke than laparoscopy.[8,10]

To emphasize, the current evidences do not suggest an increased risk of transmission of SARS-CoV-2 during gynecological laparoscopic surgery, provided all preventive measures taken. Laparoscopy should be preferred over open surgery wherever feasible.

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Conflicts of interest

There are no conflicts of interest.

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