

RECOMMENDATIONS FOR SURGERY DURING COVID-19

SAGES – SOCIETY OF AMERICAN GASTROINTESTINAL AND ENDOSCOPIC SURGEONS

<https://www.sages.org/recommendations-surgical-response-covid-19/>

Recommends for laparoscopy "incisions for ports should be as small as possible to allow for the passage of ports but not allow for leakage around ports."

JOURNAL OF VISCERAL SURGERY

<https://www.sciencedirect.com/science/article/pii/S1878788620300709>

Strategy for the practice of digestive and oncological surgery during the Covid-19 epidemic

"Precautions concerning laparoscopy (appendectomy, exploratory, etc.) ... make appropriate openings to introduce trocars without leakage and use balloon trocars if available."

ARTICLE IN JMIG – JOURNAL OF MINIMALLY INVASIVE GYNECOLOGY

[https://www.jmig.org/article/S1553-4650\(20\)30171-0/fulltext](https://www.jmig.org/article/S1553-4650(20)30171-0/fulltext)

Understanding the "Scope" of the Problem: Why Laparoscopy is Considered Safe During the COVID-19 Pandemic

"On the basis of the on best available evidence, we concur with both the recent US joint professional society statement on minimally invasive gynecology during the COVID-19 pandemic (1) as well as the European joint society statements, (2) endorsing laparoscopy as a safe surgical approach in this setting.

"Performing laparoscopy with lower intraabdominal carbon dioxide pressures and minimizing the use of energy will limit the production of surgical plume and pneumoperitoneum."

"Ideally, gas and plume evacuation and filtration are accomplished with the use of ultralow particulate air filter [ULPA] rated to screen particles of 0.1 micron in diameter (e.g., the ConMed Airseal or Stryker Pneumoclear)."

"In conjunction with tightly fitting laparoscopic ports...It is important to avoid sudden release of the pneumoperitoneum. This is most relevant before tissue extraction, whether via a mini-laparotomy or vaginally, and at the completion of the surgery."

"The use of a containment bag for tissue extraction can help maintain the seal and may limit the loss of pneumoperitoneum."

SLS - SOCIETY OF LAPAROENDOSCOPIC SURGEONS

<https://sls.org/>

"COVID-19 does involve the GI tract, and viral particles have been recovered from feces of infected patients. This likely means that intestinal contents can be contaminated and handling intestinal fluids and minimizing aerosolization of these fluids is prudent."

COVID-19: PANDEMIC SURGERY GUIDANCE

https://www.4open-sciences.org/articles/fopen/full_html/2020/01/fopen200002s/fopen200002s.html

"The China and Italy experiences are particularly helpful by providing suggestions like using low pressure peritoneum, use of balloon trocars, evacuating all pneumoperitoneum before trocar removal or specimen extractions."

PAPER IN ANNALS OF SURGERY

https://journals.lww.com/annalsofsurgery/Documents/COVID%20Surgery_VF.pdf

Adapt Surgical Technique to Reduce Exposure Risks

“Care should be taken to minimize the possibility of inadvertent release and filter the CO2 using existing technology.”

“However, the use of a smoke evacuation device is in line with pre-existing OR guidelines³⁰ and may reduce aerosol exposure in both open and laparoscopic procedures.”

ESGE – EUROPEAN SOCIETY OF GYNECOLOGIC ENDOSCOPY

<https://esge.org/wp-content/uploads/2020/03/Covid19StatementESGE.pdf>

ESGE GYN laparoscopic Surgery Recommendations:

- “During laparoscopic surgery take steps to minimise CO2 release.”
- “For specimen retrieval such as in ectopic pregnancy, deflate the abdomen with a suction device before removing the specimen bag from the abdomen. Re-insert the port before turning CO2 on again.”
- “Minimise use of ultrasound and diathermy if possible.”

AIS CHANNEL WEBINAR – STRATEGIES FOR MANAGEMENT OF COLORECTAL CANCER PART 11

<https://aischannel.com/congress/colorectal-management-covid-19/>

"Advice is to minimize aerosol risks with PPE, tight trocar valves, closed circuit filtered smoke evacuation, low CO2 pressure, low energy, and pneumoperitoneum evacuation via suction device."

KALEIDA HEALTH GUIDELINES

<https://www.kaleidahealth.org/coronavirus/support/literature/Additional-Recommendations-in-Minimally-Invasive-Surgery.pdf>

“There are prior reports of disease transmission via aerosolization in laparoscopy (non-COVID cases)³. Therefore, aerosol dispersal must be kept to a minimum.

- Preventing gush of fluid from air leakage or incisions
- Liberal use of suctioning smoke and aerosol and avoidance of two-way insufflators to prevent colonization of circuits or insufflator
- Utilize the least amount of insufflation pressure possible
- Use the lowest electrosurgical settings possible
- EDUCATE perioperative staff on the potential hazards of smoke and aerosolization.”