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LETTER TO THE EDITOR

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Considerations for transanal surgery during COVID-19 pandemic

To the Editor,

Sorrentino et al[1] recently reported their experience with surgery in 54 patients with colorectal cancer. All patients had preoperative screening based on clinical symptoms, blood tests, computed tomography scan, and nasopharyngeal swabs, and they proceeded for surgery if all tests were negative. This included patients undergoing endoscopic transanal surgery. It is noteworthy to mention that positive-pressure transanal surgery, such as transanal endoscopic microsurgery, transanal minimally invasive surgery, and transanal/transrectal natural-orifice transluminal endoscopic surgery are considered aerosol generating procedures. Performing these procedures during the period of coronavirus disease-2019 (COVID-19) pandemic may carry a potential risk of short-range airborne transmission (ie, within 1-m distance) to the surgical team from exposure to fecal and body fluid aerosols. This is particularly relevant to countries with high level of epidemicity such as Italy.

Several lines of evidence have supported possible fecal-oral transmission of the novel coronavirus-2 (severe acute respiratory syndrome coronavirus 2 [SARS-CoV-2]). The virus has a tropism to the gastrointestinal tract and causes diarrhea in almost 13% of patients with COVID-19.[2] It was also shown that viral RNA is present in 27% to 83% of anal swabs and stool specimens of patients with COVID-9.[2] Furthermore, 70% of patients who tested positive for both respiratory and stool specimens, had persistent positive stool viral RNA for up to 33 days continuously after negative respiratory samples.[2,3] More importantly, live and infectious virus was successfully isolated by independent laboratories from stool specimens of patients infected with SARS-CoV-2, including those who did not have diarrhea.[4-6]

Considering the prolonged viral shedding in stool by patients with COVID-19 as well as asymptomatic carriers,[7,8] it would seem appropriate to perform routine preoperative fecal testing for SARS-CoV-2, in addition to nasopharyngeal screening, in patients undergoing transanal surgery under positive pressure. For patients with confirmed SARS-CoV-2 infection, conventional open and robotic approaches, atmospheric transanal surgery with high volume smoke evacuation, and temporization with chemotherapy and/or radiotherapy may be safer alternatives.

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