The Editors welcome topical correspondence from readers relating to articles published in the Journal. Letters should be submitted electronically via the BJS submission site (mc.manuscriptcentral.com/bjs). All correspondence will be reviewed and, if approved, appear in the Journal. Correspondence must be no more than 300 words in length.

Is minimal access surgery possible and safe during the COVID-19 pandemic?

Editor

COVID-19 has caused a major pandemic since its origin in Wuhan, China. As of 25 April 2020, there are 84 311 confirmed cases and 4642 deaths in China, with 2 845 858 confirmed cases and 197 846 deaths around the world. This has placed enormous and unprecedented strain on healthcare systems worldwide[1]. While every effort has been made to contain the spread of infection, this has adversely affected the ability of hospitals to provide cancer care and urgent care for surgical patients[2].

Surgical procedures with increased risk of aerosol generation have been seen as high-risk interventions. Various guidelines have been published raising caution with the use of laparoscopy and robotic surgery during the pandemic, as it may put staff in theatres at a high risk of contamination[3,4]. There have been multiple, conflicting and changing guidelines due to the nature of the virus and our relative poor understanding of how to manage a global pandemic[5].

Laparoscopy and robotic surgery is the mainstay of the surgical approach in various disciplines including general surgery, urology and gynaecology. Changing urgent cancer procedures to open surgery may reduce the anticipated risk of viral transmission but will possibly increase the length of hospital stay and complications, making patients more vulnerable to cross-infection. We may also find a number of deskilled surgeons attempting open surgery in complex cancer cases.

Concerns regarding aerosol transmission with laparoscopy and robotic surgery can be addressed by adhering to safe surgical technique and following standard safety measures. Surgeons should make smaller incisions for ports to avoid gas leak, use appropriately sized access ports and avoid using 5-mm instruments through a 10/12-mm port or 8-mm robotic cannula. The number of staff in theatre should be minimized and the operating team should wear full personal protective equipment (PPE) and prevent sudden deflation of the abdomen or chest. Using AirSeal® (CONMED, Utica, New York, USA) or similar systems, which allow close circuit evacuation, or an ultralow particulate air filtration system is advisable. Careful closed evacuation of all CO_2 at the end of procedure, prior to specimen and port removal, can prevent the spray effect and risk of contamination.

At our institution, we have continued to operate for selected urgent cancers. Across four specialties (upper and lower gastrointestinal, urology and gynaecology) over a period of 5 weeks (16 March to 23 April), 53 robotic and 55 laparoscopic procedures were carried out successfully. We have not seen a single postoperative case infected with COVID-19 and none of the theatre staff has reported any infection. In the hospital overall, there have been 190 COVID-19-related deaths in this period.

We recommend that anticipated concerns from laparoscopy and robotic surgery in the COVID-19 pandemic are overestimated. Of course, if the prevalence of COVID-19 infection in the hospital or community is very high, there is limited staff and theatre availability, and lack of safety equipment, then the safest option would be to avoid the use of laparoscopy. There is a lack of strong evidence and with careful precautions, laparoscopy can still be performed in a safe manner.

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