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Correspondence

COVID-19: Effect on patients with gastrointestinal cancer and surgery

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Dear Editor,

Our daily life has been massively subverted by the unforeseen arrival of the coronavirus disease 2019 (COVID-19).

After having broadly changed our daily approach to life, it forced us to reinvent the clinical pathways through which patients with cancer need to be cured. Currently, gastrointestinal tumors are common worldwide, accounting for more than 22% of cancer cases in men and more than 13.3% of cases in women [1].

Patients with cancer are more susceptible to COVID-19 and they seem to have more severe symptoms, as demonstrated in a retrospective analysis. Worldwide patients suffering from gastrointestinal cancer are overlooking the COVID-19 pandemic and they desperately need a different approach to complete clinical diagnosis and treatment pathways without being infected by the virus.

The postponement of treatment for patients who are currently undergoing any preoperative or postoperative protocols could be fatal for these patients.

Patients with solid tumors, like gastrointestinal cancer, should be treated with adjuvant therapy, despite the high risk of being infected by COVID-19 infection during these clinical pathways. Finally, any delays in the treatment process of patients with an advanced tumor could worsen performance status and decrease overall survival (OS).

Although some algorithms have been created to prioritize patients based on cancer type and extension, prognosis, treatment and risk of COVID-19 transmission, pressing worldwide guidelines are urgently needed to plan cancer care for gastrointestinal cancer patients, and decreasing the risk of SARS-CoV2 infection.

As Liu Z et al. demonstrated, patients eligible for surgery can be divided into three risk categories, confirmed and suspected patients, high-risk patients and low-risk patients [2].

Elective surgery procedures for the first group of patients should be rescheduled and they should be followed clinically. For the second group surgery should be decided according to several needs. Ultimately, for low-risk patients elective surgery should not be cancelled unless there is a dramatic decrease in health resources. Before being operated, patients with gastric cancer or colon cancer have to follow well-designed clinical diagnostic pathways, like endoscopy [3].

Healthcare spaces ranging from endoscopy to operating rooms have been successfully converted into negative pressure rooms for COVID-19

patients in several hospitals to assure safe procedures to these patients.

Another emerging aspect of solid gastrointestinal tumors is the method of surgical access. The surgical treatment of gastric and other intestinal tumors requires minimally invasive surgery with pneumoperitoneum, which is an aerosol generating procedure (AGP), putting these patients in jeopardy.

The main reason is the presence of the low mobility of aerosols in the pneumoperitoneum. The air particles tend to be more concentrated in the abdominal cavity, exposing patients to an increased risk to contract the S ARS-CoV2 virus compared to traditional open surgery [4].

As reported by Alessandro Steven D. Wexner et al. Pressurized Intraoperative Aerosol Chemotherapy (PIPAC) could be safely adopted during the COVID-19 pandemic [5].

It is a minimally invasive therapy that distributes chemotherapy as a pressurized aerosol into the abdominal cavity during laparoscopy, and is used to treat advanced peritoneal metastases with a palliative or neoadjuvant purpose.

It is normally exploited to prevent the spread of toxic particles to healthcare operators.

By analogy, some of these procedures could be introduced during laparoscopic surgeries in COVID-19 positive patients to prevent the transmission of this virus.

As reported in literature, more attention should be adopted during the execution of laparoscopy, including ventilatory intubation, maintenance of pneumoperitoneum, use of electrical surgical devices, smoke evacuation, removal of trocars and final incision closure.

One of the possible preventive procedure that can be safely applied during laparoscopic surgery is a combination of adequate air changes and local exhaust ventilation inside the room, decreasing significantly the risk for patients to be infected by the virus.

Despite the increasing fear concerning mini-invasive surgery during the COVID-19 pandemic and the adopted preventive measures, there is currently not enough data to demonstrate the higher safety of open or a minimally invasive surgical approach to contain the spread of the virus in the operating room.

Thus, well-created and safe protocols should be generated and extended them worldwide in order to enlarge the level of care for all patients suffering from gastric cancer.

Finally, endoscopic and/or laparoscopic procedures to treat rapidly

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increasing benign and malignant diseases should be safely maintained.

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