Eur Surg (2021) 53:35–36 https://doi.org/10.1007/s10353-020-00658-9





Letter to the Editor

Taylan Özgür Sezer D · Berk Sertöz D · Özgür Fırat D · Sinan Ersin D

Received: 29 June 2020 / Accepted: 24 July 2020 / Published online: 21 August 2020 © Springer-Verlag GmbH Austria, part of Springer Nature 2020

Dear Editor,

COVID-19 is 3.5 times more common in cancer patients than in the healthy population. Also, mortality and the need for intensive care are 5 times greater in cancer patients with COVID-19 compared to the healthy population [1, 2]. The main discussion is; how to treat gastric cancer, as cancer patients are more likely to become infected with COVID-19 (Fig. 1).

What happens if gastric cancer is left untreated?

The median progression times according to The TNM classification of malignant (TNM) stage were 34 months from stage I to stage II, 19 months from stage II to stage III, and 1.8 months from stage III to stage IV [3]. The time taken for a tumor in the early stage (stage 1) to proceed to the advanced stage (stage 2) was 34 months on average [3]. For this reason, staging should be done correctly in patients diagnosed with stomach cancer at first place. Within this context, for patients with early gastric cancer, it seems as though the surgery can wait, while the decisionmaking process should involve the patient and the family. However, in the vagueness of the COVID-19 pandemic, the pros and cons of a delay in surgery for advanced gastric cancer should be considered. The operation can be postponed in patients with early gastric cancer, and in stage II and III gastric cancer, patients may be referred to neoadjuvant therapy [4]. The French group recommend that in advanced stomach cancer, neoadjuvant therapy should be used instead of surgery during the pandemic. In patients whose neoadjuvant treatments are completed during

Ass. Prof. T. Ö. Sezer $(\boxtimes) \cdot B$. Sertöz \cdot Ö. Fırat \cdot S. Ersin Department of General Surgery, Ege University School of Medicine, 35400 İzmir, Turkey taylansezer@yahoo.com.tr

COVID-19, nutritional support can be given together with 1 or 2 cycles of chemotherapy, according to the availability of the esophageal cancer center [2]. We think that this algorithm might be applied in advanced gastric cancer with the preoperative nutrition. In patients with stenosis, placement of a stent may allow oral nutrition and improve the quality of life.

Clinic

At the first place, detailed history should be taken from the patient including whether he/she has been in contact with a COVID-positive patient or with suspected COVID in the past 2 weeks. Fever and cough symptoms seen in COVID-19 are rare in patients with stomach cancer. Therefore, if there is fever in patients with gastric cancer, it should be evaluated according to the COVID-19 algorithm [2, 4]. These patients should be kept under observation for at least 2 weeks. It should also be explained to the patients and their families that stomach cancer is a slowly progressing disease, and that a waiting period of 2 weeks will not affect the treatment and prognosis [2, 5].

Treatment

The majority of healthcare resources in hospitals are reserved for COVID-19 infection. Therefore, if the fundamental resources may not be available in case of postoperative complications, surgery should be postponed or referred to another center.

Preparation of the inpatient

The patient should be operated upon as soon as possible after hospitalization and should lie in a single room which must be isolated for at least 2 weeks. Even if there is no fever, body temperature should be mon-



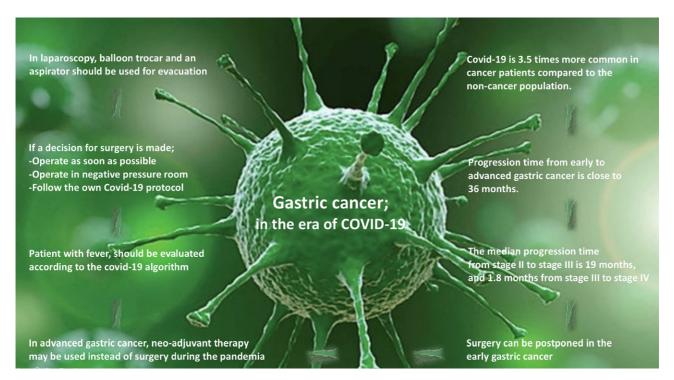


Fig. 1 Gastric Cancer; in the era of COVID-19

itored twice a day. At least one COVID-19 nucleic acid test should be performed before surgery [2, 4].

Intraoperative management

Surgery should be performed in a negative pressure room and the number of visitors to the operating room should be restricted. The surgical team should wear disposable protective clothing, masks, and goggles. The operating room should be sterilized after the operation [2, 5].

Laparoscopy

Laparoscopy may be preferred because it shortens the hospitalization period and has positive effects on respiratory functions. However, during the COVID-19 pandemic period, the pathogen in the peritoneal cavity of infected patients may spread during surgery. This can cause healthcare providers or devices to become infected. If laparoscopy is performed, disposable tools should be used and it must be ensured that there are no air leaks in connections. Balloon trocar and aspirator should be used for evacuation and the air should be thoroughly aspirated before removal of trocars at the end of the operation [2, 4].

Postoperative care

Postoperatively, a single room should be preferred. Electronic video communication can be provided to reduce stress and anxiety in and around the patient. For patients without fever, body temperature should

be monitored twice a day and respiratory symptoms should be observed. Complete blood count, liver and kidney function tests, C-reactive protein, and procalcitonin should be checked daily until postoperative day three. In case of suspicious symptoms, antigen tests and multiplex PCR should be applied for influenza virus, adenovirus, respiratory syncytial virus, and other pulmonary mycoplasma infections. Also, a nucleic acid test should be performed for COVID-19 [2].

Conflict of interest T.Ö. Sezer, B. Sertöz, Ö. Fırat, and S. Ersin declare that they have no competing interests.

References

- 1. Sohrabi C, Alsafi Z, O'Neill N, et al. World Health Organization declares global emergency: a review of the 2019 novel coronavirus (COVID-19). Int J Surg. 2020;76:71–6.
- 2. Li Y, Qin JJ, Wang Z, Wang Z, et al. Surgical treatment for esophageal cancer during the outbreak of COVID-19. Zhonghua Zhong Liu Za Zhi. 2020;42(4):296–300.
- 3. Oh SY, Lee JH, Lee HJ, et al. Natural history of gastric cancer: observational study of gastric cancer patients not treated during follow-up. Ann Surg Oncol. 2019;26(9):2905–11.
- Ma FH, Hu HT, Tian YT. Surgical treatment strategy for digestive system malignancies during the outbreak of novel coronavirus pneumonia. Zhonghua Zhong Liu Za Zhi. 2020;42(3):180–3.
- 5. Tuech JJ, Gangloff A, Di Fiore F, et al. Strategy for the practice of digestive and oncological surgery during Covid-19 epidemic. J Visc Surg. 2020; https://doi.org/10.1016/j.jviscsurg.2020.03.008.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

