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The Asian Approach to the Management of Gastrointestinal Cancer Patients During the COVID-19 Pandemic Era

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Introduction

On December 8, 2019, a few cases of previously unidentified viral pneumonia were reported in Wuhan, China, which was later designated as coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2).¹ Since its initial outbreak in the Hubei region of China, the disease spread worldwide and the World Health Organization declared as a global pandemic by March 11, 2020. This highly contagious disease has significantly affected management of patients with cancer in Asia, as well as other regions of the world. Cancer centers in each country have endeavored to provide the appropriate management for patients in different manners.

Discussion

In China, the number of COVID-19 cases increased steeply since the first report in December 2019, doubling almost every day during the early phase of the outbreak.¹ A total of 83,057 confirmed patients with 4634 mortality cases have been reported as of June 12, 2020. The spread of the disease within health care facilities was a major issue, with a report from a hospital in Wuhan showing that 41% of confirmed cases were nosocomial.² Compared with the other patients, patients with cancer are more likely to be immunocompromised and more frequently visit the clinic and/or are admitted. Hence, infection control by reducing unnecessary hospital visits is absolutely crucial for the optimal management of patients with cancer in China where the nosocomial spread of COVID-19 has been noted. The Chinese National Cancer Center recommended weighing the risk of COVID-19 infection and the benefit

of continuing treatment for patients with cancer.³ They also recommended simplifying the dosing schedules of chemotherapy and treating on an outpatient basis if allowed. Outpatients should be thoroughly screened with history and chest radiography. Screening with COVID-19 testing should be performed if patients present with fever, chills, shortness of breath, and cough and/or if the patient expresses exposure to infected patients.

In response to this pandemic, cancer centers in China made several important changes in colorectal cancer management.⁴ Patients with early cancer requiring endoscopic resection had their invasive procedures delayed.¹ For patients requiring surgical resection, nonemergency cases were delayed even for those unlikely to have COVID-19, especially if personal protective equipment and negative pressure rooms were in short supply. The decision was also made to reduce the intensity and duration for adjuvant chemotherapy following surgical resection.⁵ Neoadjuvant chemotherapy for locally advanced disease was administered as normal, but regimens with long intervals (3 to 4 weeks) were recommended to reduce clinic visits. Long-term radiotherapy schedules were provided to bridge the gap of delayed surgical resection. Treatment for metastatic colorectal cancer was continued, although a switch to oral chemotherapy regimens and treatments with longer interval regimens were favored. In some centers, capecitabine and oxaliplatin (CAPOX) or capecitabine and irinotecan (CAPIRI) regimens were preferred due to shorter hospitalization duration and similar efficacy, as shown in the AXEPT study.¹ They also referred patients to nearby local centers to avoid unnecessary travel. Immediate surgery was offered only to patients who presented with acute symptoms such as hemorrhage or obstruction, which could not be managed by endoscopic procedures, and fully protective measures were necessary during surgery. Delaying imaging follow-up was also considered reasonable, especially if the disease and patients' clinical status were stable.

In South Korea, COVID-19 spread quickly since the confirmation of the first case on January 20, 2020, and currently, a total

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Asian Approach to GI Cancer During COVID-19

of 12,003 COVID-19 cases have been confirmed, with 277 mortality cases as of June 12, 2020. In the early phase of the outbreak, dissemination peaked in the Daegu city and the surrounding Gyeongbuk province during February 2020, with more than 100 new daily confirmed cases. A surge in COVID-19 during that time hindered standard management of patients with cancer, but the propagation of this infection has subsided. The unique characteristic of cancer management in South Korea is that most patients are diagnosed and treated in centers located in metropolitan areas (eg, Seoul, Daegu, and Busan). At present, most cancer centers have policies on maintaining the usual standard of care in patients with all types of cancer including gastrointestinal cancer, even under strict protocols for preventing the spread of COVID-19. Continuation of cancer management without major compromises in South Korea is largely due to the well-established infection control protocols in each hospital, which stemmed from their experience with the Middle East respiratory syndrome outbreak in 2015. Importantly, the Korean government provides complete and systematic epidemiologic data of confirmed COVID-19 cases; this allows effective preemptive isolation for those with close contacts, which minimizes the spread of the disease through health care facilities. In addition, the testing capacity for SARS-CoV-2 polymerase chain reaction (PCR) was rapidly established throughout the nation, which supported extensive screening for suspicious cases. The nationwide cooperation of South Korean citizens to the government policies against COVID-19 (eg, social distancing, personal hygiene) was also an encouraging phenomenon that likely played a critical role in controlling the outbreak.

According to the guidelines published by the Korean Cancer Association and National Cancer Center, changes and delays in the management of patients with cancer (including clinical trials) are not necessary in the absence of direct suspicion or confirmation of COVID-19.⁶ If a patient is suspected or confirmed with COVID-19, cancer treatment should be stopped and appropriate evaluation and management must be given to the patient. The timing of resuming cancer treatment should be determined by a shared decision-making process among treating physicians including expert oncologists. In the South Korean cancer centers, strict infection control was applied since the early phase of the outbreak.⁷ This approach included the screening of all patients before their outpatient clinic visits.⁷ Patients with COVID-19—associated symptoms or epidemiologic links to confirmed COVID-19 cases are categorized as high-risk patients; for these patients, clinic visits are delayed for 14 days or COVID-19 screening tests are carried out according to the specific groups as defined in the protocols of each center. Patients being admitted to general inpatient services undergo screening with PCR testing

irrespective of their symptoms. High-risk patients being admitted to the hospital are isolated in single-bed rooms until they are allowed to move to multi-bed rooms according to the hospital protocol of each center. With these efforts, the standard of care was given to patients without compromise, except for some protocol deviations in clinical trials due to the delay of monitoring visits.

In Japan, COVID-19 spread vastly throughout the country, and the government announced a state of emergency on April 7, 2020. As of June 12, 2020, a total of 17,292 confirmed patients and 920 mortality cases due to COVID-19 have been reported. The outbreak affected the daily practice of cancer patient management in Japan. In a survey on 1101 breast cancer and gynecologic patients with cancer from April 19 to 25, 2020, 272 (24.7%) patients responded that they had their scheduled treatment or follow-up visits postponed during the pandemic. A similar approach was taken for colorectal patients with cancer. Psychological aspect of the patients was also influenced by the outbreak. Patients with cancer are feeling anxious as they find themselves more vulnerable to the disease than others.

Conclusion

In summary, among the various Asian nations, differences exist between the measures applied to provide optimal management to patients with cancer during the COVID-19 pandemic. We believe that everyday practice provided to patients with cancer in each local center will improve toward less compromise in standard care while minimizing the risk of COVID-19 infection.

Disclosure

The authors declare no competing interests.

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