How to ensure the safety of chemotherapy for advanced cancer patients in the context of new coronavirus?

In January 2020, a new coronavirus pneumonia broke out in Wuhan, China. The new coronavirus is a new virus that is highly contagious and has a high lethality (Li et al., 2020). China has adopted the strictest restrictive measures since the People's Republic of China was founded. Many hospitals in Wuhan have been transformed into specialist hospitals for infectious diseases, patients with chronic diseases such as cancer were transferred to designated hospitals, and some cancer patients could not be treated on time.

Liang et al. (2020) published an article in Lancet, which provided the most detailed data on new coronavirus infection among cancer patients in China. The authors concluded by using epidemiological statistics that patients with cancer were more susceptible to the new coronavirus. Though the accuracy of the conclusions was questioned due to the small sample size and inconsistencies in the baseline level of the population, however, it is a consensus that patients with advanced tumours have low immunity, so it is worth discussing how to ensure the safety of chemotherapy for patients with advanced tumours in the context of new coronavirus. Here, the experience of our centre is provided.

As of 5 June 2020, there are currently 1,268 confirmed cases of COVID-19 in Zhejiang Province where our hospital is located, ranking the third among all the provinces in China. Our hospital has sent 213 medical staff in total to support Wuhan, including one doctor and two nurses from medical oncology department. In this context, in order to ensure the safety of chemotherapy for patients with advanced cancers, our department has adopted the following measures: First, we strictly check the patient’s previous epidemiological history before admission and recommend the patients from the epidemic area to get treated with chemotherapy in the hospitals nearby. Patients with suspected exposure history need to be isolated nearby for at least 14 days and only those who are excluded from infection can be admitted to hospital. Second, all patients who came to the hospital should take a body temperature test and lung CT examination before admission, while those with a body temperature of higher than 37.3°C and had CT imaging of new coronavirus pneumonia are referral to designated hospital for treatment. Third, all patients admitted to the hospital should take their temperature twice a day. During this period, patient is arranged in one-bedroom and a mask is provided to reduce the possibility of infection. Fourth, after discharge from hospital, it is recommended that patients take blood routine test and liver and kidney function tests at the hospitals nearby, and we keep following up via WeChat and Internet medical tools. Using the above-mentioned methods, our Department of Medical Oncology conducted more than 300 cases of chemotherapy for advanced cancers in February 2020, and finally, no patient got infected by the COVID-19. That effectively ensured the safety of chemotherapy for patients with advanced cancers.

In the recent 2 months, our medical services have returned to normal. More than 3,000 employees of our hospital received the test of nucleic acid and antibody of COVID-19, no positive cases. Current hospital regulations require that newly admitted patients undergo nucleic acid and antibody testing to ensure the safety of the medical environment.

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CONFLICT OF INTEREST
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Si-Fu Yang
Zhi-Quan Qin
Li-Qin Lu
Liu Yang
Yu-Peng Hong

Medical Oncology Department, Zhejiang Provincial People's Hospital, Hangzhou Medical College, Hangzhou, China

Correspondence
Si-Fu Yang, Medical Oncology Department, Zhejiang Provincial People's Hospital, 158 Shangtang Road, Hangzhou, Zhejiang 310014, China.
Email: ysfdoctor@zju.edu.cn

ORCID
Si-Fu Yang https://orcid.org/0000-0001-6364-5488

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