

LETTER TO THE EDITOR

Clinical strategies for treating pediatric cancer during the outbreak of 2019 novel coronavirus infection

Since December 2019, a novel type of coronavirus (SARS-CoV-2) infection, which first appeared in China, has spread to over 20 countries around the world.¹ By February 19, 2020, more than 74 000 cases had been confirmed, with more than 2000 deaths, and hundreds of thousands of people are under close medical observation. About 300 children have been diagnosed; however, children with cancer are assumed to be more susceptible to this coronavirus, as their immune function may be suppressed. The purpose of this letter is to provide suggestions on how to choose a reasonable treatment strategy between epidemic prevention and anticancer therapy under the current epidemic conditions.

Pre-admission screening: Before admission, screening for SARS-CoV-2 infection should be carried out in the outpatient and emergency department for every patient and family members or caregivers. Children with fever (temperature > 37.3°C) within three days are advised to be referred to the fever clinic for screening. For suspicious patients, lung CT examination and/or nucleic acid test should be performed. Isolation and corresponding treatment should be given according to the guideline for suspected and confirmed cases. Patients who are excluded as 2019-nCoV infection can receive anticancer treatment after the isolation is removed.

Preventive measures during hospitalization: Cross infection between medical staff and patients can occur. Strict implementation of these protective measures, including hand hygiene, medical waste management, and other hospital infection control work should be enforced.

Chemotherapy: For children with normal physical status, systematic chemotherapy should be carried out after a detailed assessment of the risk of chemotherapy. For children with stable disease, One can consider moderate reduction of chemotherapy or prolongation of interval between cycles. Chemotherapy at the local hospital is recommended in order to reduce population migration.

Radiotherapy: The effect of radiotherapy on the immune function is relatively less than chemotherapy; thus, it is reasonable to continue radiotherapy according to the overall plan. However, subsequent chemotherapy might be moderately delayed. For children who are ready to start radiotherapy, a moderate delay can be scheduled.

Surgery: For suspicious or confirmed COVID-19, if surgery has to be performed, preoperative preparation should be conducted in an iso-

lation ward, and transportation should be conducted through special channels. Appropriate infection prevention and control measures must be strictly performed during surgery and anesthesia. The operation room should be thoroughly disinfected after the operation.

Follow-up: For patients who require regular follow-up after surgery, it is recommended to delay the review time if there is no special discomfort, or it can be done in the nearest hospital. If the examination results are abnormal, contact the oncologist to discuss a follow-up plan.

Due to few cases being diagnosed in pediatrics, most of our suggestions are from existing and previous experiences in adults. These suggestions may be modified after accumulating clinical evidence and experience. Pediatric oncologists should continually update their knowledge on the prevention and control of SARS-CoV-2 in children with cancer.

CONFLICTS OF INTEREST

All the authors declare that there are no conflicts of interest.

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