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LETTER TO THE EDITOR



SARS-CoV-2 disease and children under treatment for cancer

To the Editor: The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic has quickly raised a major concern for the safety of patients with cancer because of their immunosuppression. Liang and colleagues noted that individuals with cancer are at higher risk of severe SARS-CoV-2 illness than those without cancer.¹ While recognizing that children seem to have a lower incidence of disease from SARS-CoV-2,²⁻⁴ those with cancer carry a higher risk of morbidity and mortality from viral respiratory infections than their healthy peers.⁵

Early contingency planning to contain this risk has been empirically implemented accordingly, but the issue of the distraction effect raised by Cortiula and colleagues deserves more attention.⁶

Since many hospitals across the Lombardy region (in northern Italy, which has been the worst-hit area in Europe) were at the forefront in assisting patients with SARS-CoV-2, comprehensive oncology centers like ours have been appointed as reference hubs for continuing to deliver care to cancer patients. The Pediatric Unit at Fondazione IRCCS Istituto Nazionale Tumori (Milan) is one of the largest departments for children and adolescents with solid tumors in Europe, with >200 new cases yearly. We have consequently had the opportunity to manage a significant number of children and adolescents with solid tumors during this emergency.

At the time of writing (Table 1), only one of our patients under 21 years old had their treatment plan modified because of SARS-CoV-2 since the beginning of the outbreak in Italy. Chemotherapy for a 13-year-old female with Ewing sarcoma was prudentially suspended early because her father had been diagnosed with SARS-CoV-2 pneumonia. Otherwise, no changes were made to either the timing or the dose intensity of treatments and, in this same period, we have administered a total of 145 courses of chemotherapy, and two courses of high dose chemotherapy with autologous hematopoietic rescue. Patients with febrile neutropenia continued to be managed according to existing institutional guidelines, performing lung imaging only in the event of respiratory symptoms.

It is worth noting that, following the Lombardy Health Authorities' guidelines, asymptomatic patients and health professionals were not routinely tested for SARS-CoV-2 at our hospital. To date, we have had no clinically evident SARS-CoV-2 infections among our children with cancer. While recognizing the low rate of viral testing as a possible bias, it is also true that—given the acknowledged low test rates—we might have expected a wider spread of the virus from asymptomatic care-givers to patients.⁷

A substantial proportion of children with cancer are potentially curable. In this SARS-CoV-2 outbreak, a major risk for children and adolescents with cancer lies in the associated strain on the medical services. We wish to highlight the importance of a shared vision for providing cancer care to patients in the face of the uncertainty and rapid change prompted by these exceptional circumstances. Any emerging information is crucial to help us characterize the potential impact of SARS-CoV-2 in specific patient settings,⁸ orient the implementation of contingency plans, and avoid measures that may be unduly restrictive of normal healthcare activities.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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| | Confirmed SARS-CoV-2 cases | | | | | | | |
|-----------------|---------------------------------------|-------------------------------------|---------------------------------|---|--------------------------|--------|-----------------------------|----------------------|
| | Cases in hospital with symptoms | Cases in intensive care units | Patients followed at home | Aggregated active confirmed on March 24, 2020 | Recovered/ discharged | Deaths | Total cases [°] | No. Viral testing |
| Italy | 28 192 | 4023 | 45 420 | 77 635 | 15 729 | 12 428 | 105 792 | 506 968 |
| Lombardy region | 11883 | 1324 | 11 917 | 25 124 | 10 885 | 7199 | 43 208 | 114 640 |

^aAll confirmed cases since the first patient with SARS-CoV-2 in Italy (discovered on February 21, 2020).

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