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CORRESPONDENCE

COVID-19 in Pediatric Oncology Patients: Clinical Course and Outcomes from a Tertiary Care Center in North India

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To the Editor: Ensuring treatment continuation whilst safeguarding children from COVID-19 infection has been challenging for pediatric oncologists globally [1]. Information regarding the natural history of this infection in children undergoing chemotherapy is evolving. Whilst studies [2, 3] reporting mild disease in children with cancer are reassuring, other studies have reported upto 10% of these children developing severe disease [4].

We prospectively evaluated the clinical profile and outcome of COVID-19 infection in pediatric oncology patients undergoing chemotherapy at a tertiary care hospital in North India over a period of 14 mo (01-04-2020 to 31-05-2021). COVID-19 exposure was minimized by home collection of samples and teleconsults, wherever feasible. Compliance with face masks, hand sanitization, and social distancing were ensured during hospital visits. Patients were screened by real-time polymerase chain reaction (RT-PCR), if symptomatic, needing hospitalization, or prior to sedation. Asymptomatic/mildly symptomatic patients were managed with home isolation and chemotherapy deferral.

Fifty of 252 children on active treatment tested positive (median age - 6.2 y). Thirty-seven (74%) were asymptomatic. Mild/moderate and severe disease was seen in 22% and 4%, respectively, with higher prevalence in children with hematological malignancies. Four patients required hospitalization; 2 required ionotropic/ventilatory support. Complete recovery was seen in all but one child with COVID-19 encephalitis. Chemotherapy was delayed in all for a minimum of 2 wk. Elective surgery was delayed in 4 patients. Scheduled radiotherapy was continued using personal protective equipment (PPE). No patient developed multisystem inflammatory syndrome. Whether ongoing immunosuppression including intermittent corticosteroids exposure reduces its risk remains to be evaluated given its rare occurrence in this cohort documented to date.

To conclude, most children undergoing chemotherapy have asymptomatic or mild COVID-19 infection. Nevertheless, a higher proportion in comparison to general pediatric population have moderate/severe clinical course. The impact on overall outcomes will be evident only on long-term follow-up.

Declarations

Conflict of Interest None.

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