

COVID-19 in children with cancer and continuation of cancer-directed therapy during the infection- A tertiary care center experience from India

BADIRA CHERIYALINKAL PARAMBIL¹, Nirmalya Roy Moulik¹, Chetan Dhamne¹, Nidhi Dhariwal¹, Gaurav Narula², Tushar Vora¹, Maya Prasad¹, Akanksha Chichra², Shalini Jatia¹, Girish Chinnaswamy¹, and Sripad Banavali¹

¹Tata Memorial Hospital

²Tata Memorial Centre

March 30, 2022

Abstract

1 Background and Objective Coronavirus disease-2019 (COVID-19) or its complications in children with cancer were not increased as compared to normal children in earlier reports. However, continuing intensive treatment during ongoing COVID-19 infection has not been studied systematically. We report a single tertiary center experience on COVID-19 in children with cancer and continuation of cancer-directed therapy in them. 2 Methods Children [?]15years on active cancer treatment detected with COVID-19 until September 15th, 2020 were prospectively followed-up. Patients were managed in accordance to well-laid guidelines. Treatment was continued for children with COVID-19 infection who were clinically stable and on intensive treatment for various childhood cancers as far as practicable. 3 Results One hundred twenty-two children (median age 8years; range 1-15years, male: female 1.7:1) with cancer were diagnosed with COVID-19. All-cause mortality rate was 7.4%(n=9) and COVID-19 related mortality rate was 4.9%(n=6). Of 118 children, 99 (83.9%), 60 (50.8%), 43 (36.4%), 26 (22.0%) and 6 (5.1%) had RT-PCR positivity at 14, 21, 28, 35 and 60 days from diagnosis of COVID-19 respectively. Scheduled risk-directed intravenous chemotherapy was delivered in 70 (90.9%) of 77 children on active systemic treatment with a median delay of 14days (range, 0-48days) and no increased toxicities. 4 Conclusions COVID-19 was not a major deterrent for the continuation of active cancer treatment despite persistent RT-PCR positivity. The long-term assessment of treatment adaptations requires further prospective follow up and real time addressal.

Hosted file

COVID 19 main text.docx available at <https://authorea.com/users/321709/articles/562102-covid-19-in-children-with-cancer-and-continuation-of-cancer-directed-therapy-during-the-infection-a-tertiary-care-center-experience-from-india>

Hosted file

TABLE 1.docx available at <https://authorea.com/users/321709/articles/562102-covid-19-in-children-with-cancer-and-continuation-of-cancer-directed-therapy-during-the-infection-a-tertiary-care-center-experience-from-india>

Hosted file

TABLE 2.docx available at <https://authorea.com/users/321709/articles/562102-covid-19-in-children-with-cancer-and-continuation-of-cancer-directed-therapy-during-the-infection-a-tertiary-care-center-experience-from-india>