



Continuing Cancer-Directed Therapy in Children with COVID-19 Infection—Adopting Newer Strategies?

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During initial days of the ongoing coronavirus 19 (COVID-19) pandemic, concerns regarding impact of cancer therapy on severity of COVID-19 in children along with lockdowns imposed by governments led to significant disruption of cancer care across the world. Several institutions adapted their treatment protocol to ensure continuation of care while curtailing unnecessary hospital visits [1, 2]. Yet, systematic studies of impact of COVID-19 infection and treatment disruptions on cancer care of children are few, especially in resource-constrained settings. In this issue of the Journal, the study by Parambil et al. provides an important snapshot of experience of managing COVID-19 infection among children with cancer along with strategies for treatment adaptations [3].

It is pertinent to note that, although majority of children (94.2%) had only mild disease, COVID-19–related mortality in this cohort was 4.9%, which is relatively higher than that observed in children in general [3]. This reiterates the need for adopting newer strategies to limit the infection in this vulnerable cohort of children. An important strategy in this aspect is strengthening telemedicine services and using a “shared care” model to provide cancer care without any physical hospital visits [4]. This is feasible especially in children undergoing less intensive treatment like maintenance therapy of acute lymphoblastic leukemia (ALL) or those on relatively simpler protocols as for Hodgkin lymphoma. Utilizing a “shared care” model by involving local pediatric healthcare in delivering cancer care also has the beneficial consequence of disseminating pediatric oncology care across country with reduction of healthcare burden on tertiary care institutions.

On an encouraging note, among children on active treatment, 90.9% (70/77) could receive their planned treatment protocol with a median delay of 14 d. Further treatment decision in such a scenario should be tailored according to treatment intent. While for patients with curative intent, it is reasonable to continue intensive treatment at earliest opportunity feasible; for palliative intent patients, utilizing alternative options like home-based oral metronomic therapy with similar outcome is more prudent. This also has the added advantage of reduced toxicities, reduced hospital visits, and improved quality of life of children [5].

We observe that the authors [3] have serially monitored for viral clearance by reverse-transcriptase–polymerase chain reaction (RT-PCR) assay in all patients, although the relevance of such practice on subsequent decision on treatment reinitiation is questionable. Indeed, treatments were reinitiated in clinically stable patients 1 wk from RT-PCR positivity irrespective of viral clearance without any adverse effect. Notably, in newly diagnosed patients of ALL having high leucocyte count or aggressive lymphomas, cancer therapy may be initiated even in those having active COVID-19; a delay in such an emergent situation is likely to be fatal.

While, immunosuppression due to cancer-directed therapy reflected by lower nadir absolute neutrophil count (ANC) may be responsible for delayed RT-PCR negativity, it is unclear why delayed viral clearance was observed among children with higher baseline ANC; steroid use or type of malignancy did not affect viral clearance [3]. Further studies on immunogenicity following COVID-19 infection among children with cancer, based on type of cancer and anti-neoplastic therapy, need to be conducted systematically.

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Declarations

Conflict of Interest None.

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