

Clinical Characteristics and Outcomes of Children and Adolescents with cancer infected with SARS-CoV2 at a Tertiary Care Medical Center in Jordan.

suleimman Al-Sweedan¹, Dua' Samara¹, Mo'ath Hamaidi¹, Maram Al-Hamad¹, and Dalia Alswedan¹

¹Jordan University of Science and Technology

April 16, 2024

Abstract

Background: Our knowledge about SARS-CoV2 infection is still evolving, its effects and complications on children and adolescents with cancer need to be studied more. The aim of this study is to present our experience with SARS-CoV2 infection in this population and to highlight specific complications and outcomes. **Methods:** This is a retrospective and prospective observational study, involved 21 cancer patients below the age of 18 years in north Jordan. Data regarding age, sex, cancer type, phase of treatment, duration between infection and chemotherapy and others were collected and reviewed. **Results:** A total of 21 patients with malignancy were included. Mean age of 8.5 years. Two patients (9.5%) had died; 4.7% is COVID related mortality and 4.7% related to cancer progression. Four patients had disease progression following SARS-CoV2 infection. Six cases developed hematological malignancy weeks to months after SARS-CoV2 infection and one patient was diagnosed with malignancy concomitantly with COVID-19 infection. Out of 15 patients with pre-existing malignancy, 1 patient (7%) developed pulmonary embolism, 4 (27%) patients were diagnosed with pneumonia and one patient was diagnosed with pericarditis (7%), 2 (13%) patients were admitted to pediatric intensive care unit. Regarding oxygen requirements; a total of 3 (20%) patients required some form of Oxygen supplementation. **Conclusion:** Diagnosis of COVID19 should not distract physicians from investigating new malignancy or relapse as they may come together or may be the result of COVID-19 infection. More studies and investigations are needed to identify the contribution of corona virus in pathogenesis of cancer.

Hosted file

Clinical_Characteristics_and_Outcomes_of_Children_and_Adolescents_with_cancer_infected_with_SARS.docx available at <https://authorea.com/users/736109/articles/711990-clinical-characteristics-and-outcomes-of-children-and-adolescents-with-cancer-infected-with-sars-cov2-at-a-tertiary-care-medical-center-in-jordan>

Hosted file

Table 1.docx available at <https://authorea.com/users/736109/articles/711990-clinical-characteristics-and-outcomes-of-children-and-adolescents-with-cancer-infected-with-sars-cov2-at-a-tertiary-care-medical-center-in-jordan>

Hosted file

table (2).docx available at <https://authorea.com/users/736109/articles/711990-clinical-characteristics-and-outcomes-of-children-and-adolescents-with-cancer-infected-with-sars-cov2-at-a-tertiary-care-medical-center-in-jordan>