

COVID-19, Acute Lymphoblastic Leukemia and Down Syndrome: A Short Review and a Case Report

Ahmed Arafat¹, Dinara Sadykova¹, Ayrat Ziatdinov¹, Svetlana Senek¹, Natalya Samoilova¹, and Tamara Makarova¹

¹Kazan State Medical University

October 13, 2020

Abstract

In late December 2019, Chinese citizens of the city of Wuhan, China, had shown symptoms of viral pneumonia that were not very common, with various presentations with different grades of severity, and poor response to the regular treatment. With tremendous clinical and research work, the causative of the disease outbreak has been identified as COVID-19 and has been recognized as the novel coronavirus (SARS-CoV-2), which later continued to make the headlines when the World Health Organization announced it as a pandemic on March 11, 2020, after it had hit many parts in the globe with worrying rates of morbidity and mortality. Although available data has expressed that moderate or even mild forms of the disease are expected amongst most of the pediatrics cases, very limited data are available on the prognosis and the complications of the disease on the immunocompromised, especially oncology patients. We report a case of relapsed Precursor B-cell acute lymphoblastic leukemia (ALL) of a child with Down syndrome (DS) and COVID-19 and outline the treatment regimen that we used.

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Ahmed Arafat, M.D., Ph.D. ^{1*}, Sadykova D.I. M.D., Ph.D., Ayrat Ziatdinov M.D., Ph.D.,
Svetlana Senek M.D., Ph.D., Natalya Samoilova M.D., Ph.D., Tamara Makarova M.D., Ph.D.

The first and second authors contributed equally to this work.

1. Kazan State Medical University, Kazan, Russian Federation

Children's Republican Clinical Hospital, Kazan, Russian Federation

*Corresponding Author

Figure 1. Chest CT Scans of Our Patient.

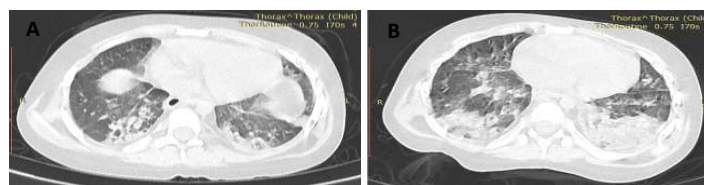


Figure 1 A. Chest CT performed on the sixth day of admission shows patchy nodular consolidations with peripheral ground-glass opacities in subpleural areas of the lower lobes of both lungs and bilateral pneumonia. B. The second chest CT which was performed a few days after the first one shows the worsening of the condition with an increase in the size of the previously described areas (figure 1a) and the identification of new areas of increased lung tissue density and consolidation.