

CYTOKINE LEVELS IN HIV-INFECTED CHILDREN WITH VIRAL DIARRHEA

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Actuality. Diarrhea occurs in 30-60% of patients with HIV in developed countries, while in low- and middle-income countries, nearly 90% of people living with HIV suffer from diarrhea. Intestinal infections are considered the primary cause of diarrhea in these regions [Wondmieni A, Gedefaw G, Alemnew B. *Intestinal parasitic infections and associated factors among people living with HIV/AIDS in Ethiopia*].

The aim of the study was to investigate changes in cytokine levels in children with viral diarrhea who are infected with HIV.

Materials and methods. The study was conducted from 2020 to 2024 at the Tashkent city specialized Infectious diseases hospital under the Republican AIDS Center. A total of 110 pediatric patients with HIV infection and viral diarrhea were selected for the study.

Results. An analysis of cytokine levels in patients revealed a decrease in the levels of IFN-alpha and IFN-gamma, which are essential components of innate antiviral immunity, in 77% and 67% of cases, respectively. An increase in IL-1beta, a marker of intoxication, was recorded in 69% of cases.

Conclusion. The decrease in cytokine levels (IFN- α , IFN- γ) and the increase in interleukin 1-beta levels indicate the progression of an acute infectious process and a deficiency in the adaptive interferon system. These findings suggest the need for interferon therapy as a treatment approach. This study underscores the importance of monitoring cytokine profiles in HIV-infected children with viral diarrhea to better understand disease mechanisms and develop targeted therapeutic approaches.