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11th July, 2025

**ASSESSMENT OF IMMUNE STATUS FEATURES IN CHILDREN
SUFFERING FROM CHRONIC TONSILLITIS ASSOCIATED WITH
CHRONIC CYTOMEGALOVIRUS INFECTION**

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To date, numerous studies have shown that inflammatory diseases often progress to a chronic course, particularly when the process is localized in the palatine tonsils. The main reason for conducting this study was the high prevalence and significance of CMV (Cytomegalovirus) and EBV (Epstein-Barr Virus) infections among children. When CMV infection is congenital, it has been well studied and thoroughly described in scientific literature. Many researchers have concluded that CMV infection may contribute to the exacerbation of numerous chronic and recurrent diseases. Furthermore, it can trigger autoimmune responses in the body. The key rationale for this study was the high incidence and clinical relevance of CMV infection among children. However, the characteristics of immune status in school-aged children with active CMV infection remain insufficiently studied.

Research Objective: To identify the clinical and immunological characteristics of patients with chronic tonsillitis of cytomegalovirus etiology.

Materials and Methods: The study involved 55 children aged 4 to 14 years. Among them, 35 were diagnosed with chronic tonsillitis associated with CMV infection, while the remaining 20 were selected as the control group. The control group consisted of healthy children with age-appropriate immune parameters. Serum levels of total immunoglobulins (IgA, IgM, IgG, and IgE) were assessed.



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As a result of these examinations, elevated levels of IgE beyond the normal range were identified. Serological tests were performed using the ELISA method.

Research Results: According to the results of the study, children with chronic tonsillitis associated with CMV infection had significantly elevated levels of IgG, indicating a chronic course of the disease. The levels of IgA and IgM were decreased, suggesting a weakening of mucosal immunity. A reduction in phagocytic activity indicated a diminished ability of the body to combat microbial pathogens.

Conclusion: In children with chronic tonsillitis associated with CMV infection, significant disturbances in various parameters of both humoral and cellular immunity were identified. These findings highlight the importance of considering immunological indicators when developing treatment and rehabilitation strategies. In the future, the clinical implementation of immunomodulatory therapy methods is considered necessary.

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