IMMUNOLOGICAL FEATURES OF ALLERGIC STOMATITIS IN EARLY CHILDHOOD

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Introduction. Allergic stomatitis in young children is an inflammatory condition affecting the oral mucosa, triggered by either immediate or delayed hypersensitivity reactions. This condition often arises in the context of allergies and the underdeveloped local immune response in the mucosa [1,2].

The aim of this study was to explore the relationship between local and systemic immune markers in children aged 1 to 4 years who have allergic stomatitis.

Materials and Methods: We included forty children in our study—20 diagnosed with atopic dermatitis (AD) and 20 healthy controls. We measured salivary secretory IgA (sIgA), total serum IgE, and the eosinophil count in peripheral blood throughout the study. The immunoglobulins were analyzed using an enzyme-linked immunosorbent assay (ELISA) [3].

Results and discussion: The average level of salivary sIgA in children with allergic stomatitis was significantly lower (40 ± 12 mg/L) compared to the controls (65 ± 10 mg/L; $p < 0.05$), indicating a weakened mucosal immune defense [1] At the same time, the total serum IgE levels were notably higher (95 ± 22 IU/ml vs. 45 ± 15 IU/ml; $p < 0.05$), along with a moderate rise in eosinophil counts, reaching up to 1.5 × 10^9/L. This pattern suggests a heightened activation of systemic allergic responses typical of pediatric allergic conditions [4]. The disparity between local and systemic immune indicators was linked to more severe clinical symptoms, such as mucosal redness, swelling, and erosive lesions.

Conclusion: In children aged 1 to 4 years, allergic stomatitis is marked by a decrease in local immune protection (lower sIgA) and an increase in systemic allergic reactivity (higher IgE and eosinophil levels). Evaluating both salivary sIgA and serum IgE together could provide a reliable indicator of disease activity and immune imbalance in pediatric allergic stomatitis. [2,4].

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