Summary

Introduction: The quantity of lymphocytes in adenoid and their cooperation in immunological processes is dependent on proliferation process and their migration to the effectory places. The most important process provide for equilibrium between lymphocytes of tonsils is apoptosis. Special meaning in induction this process has Bcl-2 family proteins with can be divided into pro-apoptotic and anti-apoptotic. An investigation was executed in hypertrophied adenoids with or without otitis media with effusion. Material and methods: By flow cytometry percentage of lymphocytes CD4+, CD8+, CD19+ and percentage of these lymphocytes with expression Bcl-2 proteins in hypertrophied adenoid and hypertrophied adenoid and otitis media with effusion was analyzed. Results: The percentage of lymphocytes CD4+Bcl-2+, CD8+Bcl-2+, CD19+Bcl-2+ was lower in hypertrophied adenoid and otitis media with effusion compared to the control group. Conclusions: Tendency to lowered percentage of lymphocytes T and B with expression Bcl-2 protein in adenoids reflects likely the local immunity alterations.