

# IMMUNOSTIMULATION OF LOCAL IMMUNITY IN THE COMPLEX TREATMENT OF CHRONIC TONSILLITIS IN CHILDREN

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**Background.** After healing the palatine tonsils in the complex conservative treatment of chronic tonsillitis, an important role is the stimulation of local immunity by applying autologous mononuclear cells. This is done by introducing these activated cells into the peritonsillar space. The application of this method does not produce immune conflict, transmission is excluded hemotransmissible pathologies, the bioethical problem is missing.

**Objective.** To examine the effect of applying local immunostimulation with activated autocytes in chronic tonsillitis in children without complications at the distance.

**Materials and methods.** Clinical and immunological studies of the treatment of children with chronic tonsillitis without complications of other organs and (74 children) were investigated in the IP Mother and Child Center, *Emilian Cotaga* Clinic, ENT Department. The method of local immunostimulation (autologous mononuclear cells) was developed in the Tissue Engineering and Cell Cultures Laboratory of *Nicolae Testemitanu* SUMPh.

**Results.** After more than 2 months of treatment were highlighted decreases in IgE content, decreases in sensitization of T lymphocytes to *Streptococcus pyogenes* and pneumococcal antigens, decreases in IgG titers, decreases in the level of pro-inflammatory cytokines *TNF-alpha*, *IL-1-8 beta*, increases in cytokines anti-inflammatory *IL-4*. The presence of *Streptococcus pyogenes* in tonsillar surface smears was significantly reduced after treatment. Over the course of a year, the number of acute respiratory infections decreased in these children, as well as indications for antibiotic therapy, signs of chronic inflammation of the palatine tonsils (caseous masses in the hollows, hyperemia of the tonsil pillars, etc)

**Conclusion.** The method of local immunostimulation (with autologous mononuclear cells) in the case of chronic tonsillitis has a positive clinical impact, exerting a positive complex action on the reactivity of immune indices.

**Keywords:** chronic tonsillitis, autologous cells, children.