

Udział IFN-gamma i TNF-alfa w etiopatogenezie polipów nosa - badania wstępne*

Role of IFN-gamma and TNF-alpha in etiology of nasal polyps - initial studies

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Summary

Objective. Nasal polyposis is a chronic inflammatory disease of the nasal mucosa. The pathogenesis of nasal polyps is still not entirely known and has been debated for many years. The aim of the present study was to evaluate the expression of interferon gamma and TNF-alpha secreted by Th1 lymphocytes and to analyze their role in the etiology of nasal polyps. **Methods.** 12 patients with nasal polyposis were selected - 6 of them allergic and 6 non-allergic. Patients with allergy were distinguished from those without allergy on the basis of positive allergy skin tests to dust and serum levels of IgE. Blood sample was obtained from patients and examined for the expression of IFN-gamma and TNF-alpha by intracellular staining procedure after stimulation with PMA/ionomycin and allergen. **Results.** Negative correlation was found between expression of IFN-gamma and TNF-alpha after PMA/ionomycin stimulation and allergen stimulation ($p > 0,05$). Statistical analysis of two groups of patients demonstrated that no significant differences in the cytokine expression in allergic versus non-allergic patients were observed although mean value of IFN-gamma and TNF-alpha were lower in allergic patients in comparison to non-allergic ($p > 0,05$). We didn't observed any correlation between expression of INF-gamma and TNF-alpha and: coexistence of bronchial asthma, allergy to aspirin and local corticosteroid treatment. In patients with recurrent polyposis the expression of INF-gamma was significantly lower ($p = 0,05$). **Conclusion.** This research suggests that IFN-gamma and TNF-alpha play a role in the pathogenesis of nasal polyps but the allergic mechanism may not play a fundamental role in this process. It needs further investigations.