

Ekspresja cząstki adhezyjnej ICAM-1 u chorych z polipami nosa*

Expression of adhesion molecule ICAM-1 in patients with nasal polyps

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Summary

Introduction. Nasal polyposis is a chronic inflammatory disease of the nasal mucosa. The prevalence of nasal polyps seems to vary between 1 and 4% of the population. 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 adhesion molecule ICAM-1 in patients with nasal polyps.

Materials and methods. 53 patients with nasal polyposis were selected and divided into two groups - allergic and 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. Immunohistochemical studies with monoclonal antibody against ICAM-1 antigen (NCL-CD54, Novocastra) using immunoperoxidase method were performed to evaluate expression of ICAM-1. **Results.** Immunoexpression of ICAM-1 was present on some epithelial cells and on fibroblast, inflammatory cells and endothelium in the submucosa. The mean \pm SD values of the immunoexpression of ICAM-1 were significantly increased in dust-sensitive patients compared with dust-tolerant patients ($1,93 \pm 0,83$ vs $0,83 \pm 0,73$ ($p < 0,001$)). **Conclusions.** This research suggests that ICAM-1 plays an important role in the pathogenesis of nasal polyps and the allergic mechanism may play a fundamental role in this process. However, further examinations to confirm this need to be undertaken.