Lysosomal exoglycosidases in nasal polyps
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ABSTRACT
Introduction: Nasal polyps are smooth outgrowths assuming a shape of grapes, formed from the nasal mucosa, limiting air flow by projecting into a lumen of a nasal cavity. Up to now the surgical resection is the best method of their treatment, but etiology and pathogenesis of the nasal polyps is not yet fully established.

Aim of the study: The aim of the study was the assessment of the selected lysosomal exoglycosidases activity in the nasal polyps. In this study the activity of β-galactosidase, α-mannosidase and α-fucosidase was determined in the tissue of the nasal polyps obtained from 40 patients (10 F, 30 M) and control tissues derived from mucosa of lower nasal conchas obtained during mucotomy from 20 patients (10 F, 10 M).

Results: We observed significant lower values of GAL, FUC and tendency to decrease of MAN and GLU concentration in nasal polyps (P) in comparison to control healthy nasal mucosa (C). In nasal polyp tissue (P) no differences of GAL, MAN and FUC specific activity in comparison to control mucosa (C).

Conclusions: Our research supports bioelectrical theory of the nasal polyps pathogenesis and directs attention at research on glycoconjugates and glycosidases of the nasal mucosa extracellular matrix.

Key words: Lysosomal exoglycosidases, α-fucosidase, β-galactosidase, α-mannosidase, Nasal polyps