

CHANGES IN LOCAL IMMUNITY PARAMETERS DURING THE USE OF IMMUNOMODULATOR AND BACTERIOPHAGE IN COMPLEX TREATMENT OF PATIENTS WITH RHINOSINUSITIS

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Abstract

Despite the considerable number of studies devoted to the problem of diagnosis and treatment of rhinosinusitis, the issues of its timely diagnosis, as well as the effective treatment of patients, are not fully resolved.

Aim: to study the state of local immunity in patients with rhinosinusitis on maintenance therapy and therapy with immunomodulator and bacteriophage.

Materials and methods. 60 patients with acute bacterial rhinosinusitis were examined. They were divided into two groups. Group 1 (comparator group) included 30 patients with rhinosinusitis receiving maintenance therapy only. Group 2 (study group) consisted of 30 patients with rhinosinusitis, which received the immunomodulator inosine pranobex and bacteriophage (pyophage) in addition to maintenance therapy. In order to evaluate the parameters of local immunity, (the level of secretory immunoglobulin A (IgA)) we conducted an immunoassay of nasal and sinuses secretions.

Results. It was found that IgA level was below (0.72 to 0.98 mg/l) the lower normal limit (1.3-13.3 mg/l) and the differences were not statistically significant in both groups of patients prior to treatment. A lower IgA level in rhinosinusitis patients indicated insufficient protection of the mucous membrane of the nasopharynx from infectious agents. Repeated examination revealed significant differences in the level of IgA between study groups. So, in Group 1 IgA concentration was 2.1 higher at the end of treatment in comparison with those at the beginning. In group 2 after treatment IgA increased by 4.3 times, indicating an improvement in local immunity of patients.

Conclusion. The therapeutic effect of adding immunomodulator and bacteriophage to the maintenance therapy in patients with rhinosinusitis requires in-depth study of the mechanisms of action of these drugs.

Key words: rhinosinusitis, local immunity, secretory immunoglobulin, immunomodulator, bacteriophage.

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