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THE EFFICACY OF ADJUVANT THERAPY OF EOSINOPHILIC ESOPHAGITIS IN CHILDREN OF SCHOOL AGE

Eosinophilic esophagitis is a recently recognized but expanding disorder characterized by antigen-driven eosinophil accumulation in the esophagus. Symptoms frequently mimic those of gastroesophageal reflux disease, but the diseases are distinct in their histopathology, gene expression signature, response to therapy, hereditary risk, and association with allergies. Clinically, EoE is characterized by symptoms of esophageal dysfunction. Pathologically 1 or more biopsy specimen must show eosinophil-predominant inflammation. Multiple biopsy specimens must be obtained from the proximal and distal esophagus. The diagnosis is considered if 15 eosinophils per high-powered field (eos/hpf) are detected in mucosal biopsies.

The study involved 44 children with suspected EoE, endoscopic and morphological diagnosis was confirmed only in 25 of them, which formed the main group. The control group consisted of 19 children who were morphologically diagnosed peptic reflux esophagitis. Children of the main group received elimination or hypoallergenic diet, Levocetirizine and probiotic based on *Lactobacillus reuteri* for one month. Children of the control group received standard

antisecretory therapy and elimination or hypoallergenic diet.

After the treatment we received unidirectional change in endoscopic and morphological parameters in both groups. Thus, multiple whitish raid that was identified during the initial endoscopy regressed completely in 72 % of children of the main group and 63% of children of the control group. The number of eosinophils in the esophageal mucosa biopsy decreased in the two groups, particularly in the study group it was $4,4 \pm 1,6$ eos/hpf in contrast of $17,28 \pm 2,37$ eos/hpf at baseline and in the control group $1,12 \pm 0,88$ eos/hpf in contrast of $3,28 \pm 1,768$, respectively. Eosinophilic microabscesses and degranulation of eosinophils regressed at all. Hyperplasia of the basal layer of the epithelium and intercellular edema were kept in 28 % and 20% of biopsies, respectively.

It was established that the use of antihistamines and probiotic based on *L. reuteri* in the age dosage with elimination or hypoallergenic diet in school-age children with morphologically verified diagnosis of eosinophilic esophagitis significantly improves the disease and improves endoscopic and morphological parameters of the disease.