

**ALLERGIC DISEASES IN CHILDREN WITH IMPAIRED INTESTINAL
DYSBIOSIS**

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Annotation: Over the past decades, the world has seen a steady increase in allergic pathology among children. Thus, in European countries, the prevalence of atopic sensitization has doubled over the past 20 years, and according to forecasts of the World Health Organization, allergic diseases will soon occupy the first place in the structure of general pathology. The aim of the article is to study and analyze allergic diseases in children with impaired дисбиозaintestinal dysbiosis.

Key words: allergic diseases in children, intestinal dysbiosis, disorder, World Health Organization.

Actuality. Currently, 25-30% of children in Russia suffer from allergic diseases [3]. At the same time, there is a shift in the timing of debut to an earlier age and a tendency to increase severe clinical forms [4]. Studies conducted over the past 10 years indicate that in Russia about a quarter of young children have manifestations of atopy, in particular atopic dermatitis (AD) [5].

It is believed that BP is the result of the interaction of several components: the influence of environmental factors, genes predisposing to the disease, skin barrier dysfunction, and immunological disorders [6].

Today, there is no doubt that allergic diseases in children are provoked by pathological quantitative and qualitative changes in the intestinal microflora, united by the term "dysbiosis". Thus, according to some studies, a violation of the normal species and population composition of the intestinal microflora is found in 93-98% of children with skin manifestations of food allergies and other allergic diseases [7]. It is known that the normal microflora of the digestive tract prevents the entry of allergens and toxins into the body by creating a microbial film on the surface of the intestinal villi. At the same time, the microbial factor is involved in the accumulation of histamine in the body's tissues. Thus, one of the factors involved in the pathogenesis of allergic phenotype formation is the state of intestinal microflora [8]. That is, dysbiosis in children can contribute to the development of AD, manifestations of food allergies, eczema, and bronchial asthma [9]. Taking into account the above, the study of clinical and laboratory features of the course of blood pressure in children with disorders of the species composition and population level of intestinal microflora should be recognized as relevant.

Thus, **the purpose of the study** was the diagnostic value of general clinical and paraclinical indicators in children with manifestations of intestinal dysbiosis on the background of blood pressure to improve the effectiveness of treatment of this disease.

Materials and methods of research. Among the features of skin damage in children of the comparison groups, a rash was noted, against which erythematous-squamous spots and peeling appeared. The course of the process should be undulating. Rashes of exudative acute inflammatory nature were mainly localized on the face, flexor and extensor surfaces of the extremities around large joints and neck. Table 1 shows the assessment of skin changes on the EASI scale in patients of both clinical groups.

Results and their discussion. Despite the absence of significant differences in the severity of clinical manifestations of atopy in representatives of both groups, when there is a

violation of the intestinal microflora in children of group 1, there is a clear tendency to a greater intensity of skin changes. Thus, the EASI score exceeding 6.4 points was recorded in 52.6% of children in the 1st clinical group and only in 28.5% of cases in the 2nd ($P > 0.05$) comparison group. At the same time, the relative risk of the above-mentioned severity of clinical manifestations of blood pressure, estimated by EASI at 6.4 points or more, in the presence of intestinal dysbiosis in relation to the group of patients without pathological disorders of the intestinal microflora with a risk of 1.6 (95% CI 1.1-2.3), absolute risk-0.2, with HS 2.8 (95% CI 1.5-4.9).

Evaluating the indicators of the general blood test, we did not find any changes in children of both clinical comparison groups. However, in children of group 1 with severe intestinal microflora disorders, the number of eosinophils in the peripheral blood was significantly higher than in infants of group 2 ($3.1 \pm 0.6\%$ and $1.5 \pm 0.5\%$ ($p < 0.05$) in accordance). At the same time, patients of group 1 showed a clear tendency to increase the absolute eosinophil number (AECH), which indicates a more pronounced response of the body to the allergic inflammatory process. Thus, the APR in children with signs of dysbiosis was 0.20 ± 0.04 g / l, and in infants without intestinal microflora disorders- 0.10 ± 0.05 g / l ($P > 0.05$). The presence of more pronounced allergic inflammation in children with a pathological violation микробиоценозаof intestinal microbiocenosis on the background of AD coincides with the opinion of a number of foreign scientists [1, p. 9], but some researchers have not found a significant relationship between the severity of allergic pathology and a violation of intestinal microflora [1, p.2].

According to the literature, some types of lactobacilli, which make up the normal microbial landscape of the intestine, contribute to an increase in the content of CD8-lymphocytes, and bifidumbacteria-to a decrease in the content of CD4-lymphocytes in the blood [1, p. 3]. The quantitative imbalance of the subpopulations of lymphocytes indicated above (a decrease in the level of CD8 - and an increase in the content of CD4-lymphocytes in the blood) underlies the development of allergic diseases. Thus, intestinal dysbiosis leads to a violation of the normal level of subpopulations of these lymphocytes and thereby increases the risk of atopy. Taking into account the fact that a violation of the normal intestinal microflora affects the pathogenetic mechanisms of atopy development, we considered it appropriate to analyze the content of total immunoglobulin E (IgE) in the blood serum of children with dysbiosis on the background of AD. Thus, a significantly higher concentration of total IgE in the blood serum of infants of the 1st clinical group was detected compared to patients of the comparison group (315.0 ± 97.1 IU / ml and 83.3 ± 31.3 IU / ml ($P < 0.05$) in accordance). At the same time, the total IgE concentration exceeding 130.0 IU / ml was recorded in 44.4% of children in the 1st clinical group and three times less often (14.2%) in the 2nd comparison group ($P > 0.05$).

Indicators of the diagnostic value of increased total IgE in the blood serum of children with dysbiosis on the background of BP in patients without pathological disorders of the intestinal microflora were as follows: sensitivity-44.4% (95% CI 34.4-54.7), specificity-85.8 % (95% CI 77.3-92.0), OP + - 3.1 and VP-0.6 The presence of dysbiosis in children with AD increased the risk of detecting a high level of total IgE in the blood serum (more than 130.0 IU / ml). The attributive risk was 0.4, the relative risk was 1.9 (95% CI 1.1-3.3), with HS 4.8 (95% CI 2.4-9.5).

The data obtained by us coincide with the opinion of most scientists, who consider the violation of the intestinal microbial landscape in children to be one of the factors that increase the risk of atopy and contribute to a more severe course of the disease [1, p. 1].

Conclusions. So, 1. Pathological violation микробиоценозаof intestinal microbiocenosis in children with AD increases the risk of severe course of this disease by 2.8 times.

2. The presence of dysbiosis in children with AD increases the risk of detecting a high concentration of total IgE in the blood serum > 130.0 IU / ml by almost 5 times (OR 4.8 (95% CI 2.4-9.5)).

3. To increase the effectiveness of treatment of AD in children in a complex of therapeutic measures, it is necessary to correct intestinal dysbiosis by prescribing prebiotic or probiotic drugs.

Reference:

1. Lv J. et al. Global, regional and national epidemiology of allergic disorders in children from 1990 to 2019: findings from the Global Burden of Disease study 2019 //BMJ open. – 2024. – Т. 14. – №. 4. – С. e080612.

2. Mousavian A. H. et al. The association of infant and mother gut microbiomes with development of allergic diseases in children: a systematic review //Journal of Asthma. – 2024. – С. 1-15.

3. Abbaslou P. et al. Non-IgE-mediated Gastrointestinal Food Allergy in Children: Our Foods and Atopy Patch Test //Journal of Kerman University of Medical Sciences. – 2024. – Т. 30. – №. 6. – С. 319-326.

4. Мамаризаев И. К. FEATURES OF THE COURSE, MORPHO-FUNCTIONAL AND CLINICAL-INSTRUMENTAL INDICATORS OF COMMUNITY-ACQUIRED PNEUMONIA WITH MYOCARDITIS IN CHILDREN //УЗБЕКСКИЙ МЕДИЦИНСКИЙ ЖУРНАЛ. – 2024. – Т. 5. – №. 2.

5. Ibragimova M. F. DIAGNOSTIC CRITERIA FOR PNEUMONIA OF ATYPICAL ETIOLOGY IN CHILDREN //British medical journal. – 2022. – Т. 2. – №. 5.

6. Закирова Б. И., Хусаинова Ш. К. OPTIMIZATION OF IRRITANT INTESTINAL SYNDROME THERAPY //ЖУРНАЛ ГЕПАТО-ГАСТРОЭНТЕРОЛОГИЧЕСКИХ ИССЛЕДОВАНИЙ. – 2023. – Т. 4. – №. 2.

7. Komilzhonovich M. I. OPTIMIZATION OF TREATMENT OF ATOPIC DERMATITIS IN CHILDREN //International journal of scientific researchers (IJSR) INDEXING. – 2024. – Т. 5. – №. 2. – С. 642-646.

8. Мамаризаев И. К., Абдукадилова Ш. Б., Джураев Ж. Д. THE ROLE OF THE HEMOSTATIC SYSTEM IN THE DEVELOPMENT OF ACUTE OBSTRUCTIVE BRONCHITIS IN CHILDREN AGAINST THE BACKGROUND OF MYOCARDITIS //УЗБЕКСКИЙ МЕДИЦИНСКИЙ ЖУРНАЛ. – 2023. – Т. 4. – №. 5.