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CORRECTION OF MICROELEMENT DEFICIENCIES IN CHILDREN WITH ATOPIC DERMATITIS.

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Background:
Atopic dermatitis (AD) is indeed a chronic inflammatory skin disease, and its development is associated with both genetic and immune factors. An integrated approach to the treatment of AD is key to achieving optimal results in therapy.

The aim of this study is to correct zinc-containing drugs in the complex therapy of atopic dermatitis in children.

Material and methods of the study. The studies were conducted in the multidisciplinary clinic of the Tashkent Medical Academy, in the department of pediatric allergology in 46 children with AtD aged 7 to 12 years. All the examined children were divided into 3 groups: 1- main group children with a diagnosis of AtD n = 17 (36.9%) (basic therapy + zinc-containing drug), 2-nd is a comparison group, children with AtD receiving only basic therapy n = 29 (63.1%). 3-rd is practically healthy children (control group, n = 20)

Results of the study. Of all the examined children with AD, the study revealed that 21 children (45.6%) had a hereditary predisposition to allergic diseases from the maternal line, and 8 children (17.1%) - from the paternal line. Depending on the Zn content in the blood serum, the children were divided into 2 subgroups. Group 1 (the main group) included children with a Zn concentration in the blood serum of less than 9.5 μmol / l. Group 2 (the comparison group) of children had a normal Zn content - more than 10 μmol / l. The examination revealed that the comparative group, with a Zn content of more than 10 μmol / l. We observed the following

clinical signs of AD: dystrophic changes in the nails in 3 children (10.3%), perioral dermatitis in 6 children (20.7%), periorbital dermatitis in 2 children (6.9%).

In children of the main group with a reduced Zn content in the blood serum, dystrophic changes in the nails were observed 3 times more often (9 children 52.9%), perioral dermatitis 2 times more often (12 children 70.6%), periorbital dermatitis 2 times more often (4 children 23.5%) than in children of the comparative group. When assessing the clinical symptoms in children of the main group (with zinc deficiency), clinical signs of AD were significantly more common, which is due to the fact that the concentration of Zn in the epidermis is higher than in the subsequent layers of the skin. This is due to the need for Zn for active proliferation and differentiation of keratinocytes. Thus, a violation of the Zn content in the epidermis due to a deficiency of nutrients affects various enzymatic reactions, transcriptional activity and functions of a number of proteins in the epidermis, leading to a violation of skin homeostasis.

All children were given therapy in accordance with laboratory test data. Children in the main group received basic therapy and were additionally prescribed immunozinc (25 mg) for 1 month, 1 tablet once a day in the morning after meals. In the comparative group, only basic therapy was prescribed. As a result of the therapy, positive dynamics of AD symptoms were noted in children in the main group. The inclusion of a zinc-containing drug in the complex therapy of AD contributed not only to a more pronounced positive dynamics of the disease severity index (SCORAD), but also to more intensive skin hydration.

During the repeated study of zinc content in the blood of children of the main group, the following was noted: in n=10 (58.8%), a slight increase in zinc level in the blood (12.8 μmol/l). Subsequently, these children were recommended to continue therapy with Immunozinc (25 mg) for 1 month. In 7 children (41.2%), zinc content in blood tests was within the normal range (N-9.8-16.8 μmol/l). These children stopped taking immunozinc preparations. It was recommended to include zinc-containing products in the diet, such as: wheat bran, beef liver, chicken breast, cheese, oatmeal, etc.

Conclusions:

Thus, in children in the study group, the incidence of Zn deficiency in the blood serum is 36.9%. Zn deficiency in children with AD was observed as clinical manifestations in the form of dystrophic changes in the nail plate, periorbital and perioral dermatitis. To correct insufficient Zn supply in patients with AD, it is necessary to prescribe zinc-containing drugs.

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