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## **MANIFESTATIONS AND TREATMENT OF ATOPIC DERMATITIS IN CHILDREN**

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Atopic dermatitis is one of the most common allergic diseases that manifests itself in a severe form, affecting the skin. The disease is genetically determined and, unfortunately, is chronic. The manifestations of atopic dermatitis are quite typical. The main clinical symptom of AD is itchy skin. It occurs in all age groups.

Atopic dermatitis is a local manifestation of internal disorders in the immune system. With such a diagnosis, first of all, treatment should be comprehensive and contribute to the normalization of the general functions of the immune system. In this regard, immunotropic drugs or, in other words, immunomodulators should play a key role in the treatment of atopic dermatitis. Although a huge step forward has been made in medicine in this area, the question of how to treat atopic dermatitis is still quite acute. The problem of therapy is serious and requires both the joint work of the doctor and the patient, and the support of the patient by his family members.

### **SYMPTOMS OF THE DISEASE**

Usually, the first manifestations of the disease begin in childhood. However, there are cases when atopic dermatitis manifested itself at a later age. In half of the patients, the first signs of AD occur in the first year of life. In 75% of them, the first symptoms can be detected at the age of 2 to 6 months. More rare are cases when patients are diagnosed with dermatitis in the period from one to 5 years of life. The most rare case is the appearance of a clinical picture at the age of 30 or even 50. According to statistics, males are more susceptible to atopic dermatitis.

At all stages, there is intense itching of the skin, as well as increased skin reactivity to various irritants. Usually, itching is a precursor to a skin rash and changes its intensity

during the day, intensifying in the evening. Over time, itching leads to unpleasant rashes, swelling, and scratching on the skin.

#### DIAGNOSIS AND SYMPTOMS OF ATOPIC DERMATITIS IN CHILDREN

The term “atopic dermatitis” is not very common outside of medical circles. People usually refer to dermatitis as diathesis, but in medicine, however, there is no such concept. At the same time, there are different stages of atopic dermatitis: the earliest, infantile, which is called diathesis, childhood, and adolescent-adult (late).

- Infantile, the earliest stage, is the period up to 2 years. Red spots appear on the child's skin, most often localized on the face (on the cheeks and forehead). Dermatitis is quite acute: the affected areas get wet, swelling occurs, and crusts form. In addition, dermatitis can affect other parts of the body (buttocks, legs, scalp). The acute stage is characterized by reddened skin and papular elements (skin tubercles).

- The period of dermatitis exacerbation is characterized by the fact that papules and red spots mainly appear in the skin folds, behind the ears, on the surface of the elbow or knee joints. The skin becomes dry and begins to peel off. Later on, the child develops increased pigmentation around the eyes, additional lining on the lower eyelid, and dull skin color characterize the “atopic face”.

- If the stage of atopic dermatitis is not acute, then most often dermatitis manifests itself in the form of dry skin, as well as cracks in the skin on the backs of the hands and fingers.

Skin atrophy, along with the adherence of pyoderma bacteria, are among the most common complications.

It is worth remembering

#### TREATMENT

Treatment should not be started on your own. To establish an accurate diagnosis and prescribe medications, you should consult a doctor. This is because a number of serious diseases have symptoms very similar to dermatitis. Self-treatment can put the child's health and even life at risk. Moreover, you should not continue the course of drug therapy on your own. Any medications have side effects, and even if they help to cope with the disease, these side effects can manifest themselves with the wrong treatment method.

General principles or how to treat atopic dermatitis:

- follow a hypoallergenic diet, eliminate the allergen;
- take antihistamines that eliminate itching;
- detoxify the body;
- use medications with anti-inflammatory effect, for example, Timogen - cream

0.05%

- take sedatives (sedatives) (glycine, various soothing herbal preparations, valerian, peony, etc;)
- use antibacterial agents (in case of infection).

In case of dermatitis exacerbation, treatment methods differ from those recommended for the normal course of the disease.

And remember that atopic dermatitis (AD) is a chronic disease that requires quite a long treatment, even if there is no exacerbation of the disease.

### HYPOALLERGENIC DIET FOR ATOPIC DERMATITIS IN CHILDREN

It is impossible to cure atopic dermatitis completely, as it is a chronic disease. However, there are methods and remedies that can reduce redness and itching. First of all, it is worth trying to eliminate the allergen that can cause a negative reaction in a child. Taking into account the degree of exacerbation of dermatitis, it is necessary to provide careful skin care for the baby.

There may be cases when allergic inflammation occurs without obvious clinical signs, while the properties of the dermis change. Moisture and skin permeability are the first to suffer. To eliminate the symptoms, medical cosmetics help well. The impaired properties of the skin are well restored with the help of vitaminized cosmetics.

A special diet plays an important role. During periods of exacerbation, the diet should be monitored especially closely. You can soften the diet if there is no exacerbation of the disease.

Maintaining breastfeeding for as long as possible (at least 6 months) is a very important element for the child's health. Foods that cause allergy exacerbation should be excluded from the diet by the mother. It is important to bathe a newborn child properly, as in the first year of life. Soap should not be used. It is recommended to use special shampoos, preferably medicated ones.

Milk protein, eggs, fish, peanuts and soy are some of the most common allergens. You need to remember that even if you are not prone to it, there is a potential risk of developing a food allergy in your child.

Allergy manifestations are different at different ages. In the first or second year of life, food allergies clearly prevail in children. In young children, food allergy treatment is a rather complicated process. For the child and his mother, during the feeding period, it is necessary to choose a proper diet - this is one of the main principles that help treat atopic dermatitis.

### PREVENTION OF ATOPIC DERMATITIS IN CHILDREN

There are two main principles in the prevention and treatment of atopic dermatitis: creating a hypoallergenic environment to eliminate contact with allergens and, of course, following a special diet. If these principles are not followed, the effectiveness of treatment is significantly reduced [2].

In fact, creating a hypoallergenic environment means adhering to a special lifestyle. The main goal is to eliminate factors that can potentially cause skin irritation, thereby provoking an exacerbation of dermatitis.

The following recommendations apply to prevent AD and create a hypoallergenic environment:

- The room temperature should be kept at no higher than +23°C, and the relative humidity should be at least 60%.
- Antihistamines are recommended to relieve itching.
- Possible allergens must be excluded from food

- Feather, down pillows and woolen blankets should be replaced with synthetic ones.
- Dust sources in the house should be eliminated (carpets, books).
- The room should be wet cleaned at least once a week.
- Particular attention should be paid to removing areas of possible mold formation (bathroom seams, linoleum, wallpaper).
- Pets and plants should be isolated. It is necessary to destroy insects (moths, cockroaches).
- Pay attention to limiting or eliminating the use of various irritants (washing powders, synthetic detergents, solvents, glue, varnishes, paints, etc.) - You cannot smoke in the house where the patient is staying.
- Treatment with herbal remedies is excluded.
- Intense, excessive physical activity should be limited.
- For bathing, patients should use slightly alkaline or indifferent soaps (lanolin, baby) or high-quality shampoos that do not contain artificial colors, flavors, and preservatives.
- When bathing, it is recommended to use soft cloth sponges.
- The use of a softening, moisturizing neutral cream on the skin after a bath or shower is mandatory.
- Stressful situations should be minimized.

In addition, you should avoid combing and rubbing the skin.

### VACATIONING WITH A CHILD WITH ATOPIC DERMATITIS

A child with atopic dermatitis should not sunbathe - parents should remember this. It is a common mistake to leave a patient in the sun for a long time. Despite the fact that this can lead to temporary improvements, a severe exacerbation of the disease is inevitable in the future.

For patients with atopic dermatitis, the coasts of the Black and Azov Seas, as well as other vacation destinations with a warm but dry climate, are favorable [1].

### References

1. Repetskaya M.N., Shaidullina E.V., Bogatyreva K.S. Treatment of atopic dermatitis in children with regard to skin microbiocenosis // *Fundamental research*. - 2012. - No. 12-2. - P. 350-354;  
URL: <http://www.fundamental-research.ru/ru/article/view?id=30892> (accessed April 20, 2019).
2. Osawa R., Akiyama M., Shimizu H. Filaggrin gene defects and the risk of developing allergic disorders // *Allergol. Int.* - 2011. - Vol. 60, N 1. - P. 1-9.
3. Novak N., Simon D. Atopic dermatitis - from new pathophysiologic insights to individualized therapy // *Allergy*. - 2011. - Vol. 66, N 7. -P. 830-839.
4. Wichmann K., Heratizadeh A., Werfel T. Food allergy in atopic dermatitis // *Hautarzt*. - 2012. - Bd 63, N 4. - S. 315-324.

