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CLINICAL AND IMMUNOLOGICAL CHARACTERISTICS OF ATOPIC DERMATITIS IN CHILDREN OF THE POPULATION OF PRODUCTION ENTERPRISES

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Summary
At the present stage of development of society, when new industrial facilities, technological processes are commissioned, when chemicals are used in everyday life and industry, environmental degradation is inevitable. The study of the influence of occupational hazards of parents on allergic morbidity in children is of particular relevance. The significance of this problem increases due to the need to determine the true value of occupational hazards and the implementation of the mechanisms of allergic pathology in the children of workers.

Keywords: allergic skin diseases, atopic dermatitis, allergic dermatosis

Atopic dermatitis is one of the most common allergic skin diseases and reaches 15 cases or more per 1000 population, while numerous studies prove its growth worldwide [1,2]. The term "atopic dermatitis", proposed in 1935 by M.S. Sulzberger, according to the International Classification of Diseases of the IXth revision to designate skin lesions resulting from a hereditary lesion of the whole organism - atopy, is reflected in the ICD - 10 [4].

Allergic diseases, which affect 30-40% of the world's population, are a major medical and social problem and, according to WHO, in the next 20-30 years, they will come out on top in the structure of morbidity [1,3].

The results of studies by the European Academy of Allergy and Clinical Immunology (EAACI) show that by 2025, half of the inhabitants of European countries will be affected by allergic diseases. Allergic dermatosis accounts for more than 60% of all forms of allergic diseases, and among them the most common is atopic dermatitis (AD) [1,4].

The severity of the problem of AD is due not only to its high prevalence in the child population, but also to its early onset, the rapidity of the development of chronic forms, accompanied by psychoneurovegetative disorders in most patients and a decrease in the social adaptation of the child. The debut of AD during the first 6 months of life occurs in 45% of children, during the first year of life - in 60% and up to 5 years of age - in 85%.

Currently, there is no doubt that the basis of the etiopathogenesis of AD is a hereditary predisposition observed in 75-80% of patients, and which in different patients is realized at different periods of life under the influence of various factors (trigger and aggravating their effect) [2,3, four].

In the pathogenesis of AD, immunological disorders are important, which are associated with the development of allergic reactions, accompanied by the release of various mediators from mast cells (histamine, serotonin, leukotrienes, etc.)

Risk factors for the development, clinical course and pathogenesis of allergic diseases, including allergic dermatoses in different climatic and geographical zones, have their own characteristics, which have not been studied enough in hot climates [2,4,7,8].

Treatment of patients with AD is a difficult task [2,3,6]. Important in the treatment of AD are antihistamines (antagonists or blockers of H1 receptors). In recent years, 2nd generation antihistamines, which have a slight sedative effect, and complex drugs that simultaneously act on various inflammatory mediators released from mast cells and basophils are more often used [1,2].

One of these drugs is leson, which includes the highly selective H1-histamine blocker levocetirizine and montelukast, a leukotriene receptor blocker [7].

Despite the progress made in the field of vaccine immunology, there is still a problem of vaccination coverage of the child population, especially children with an unfavorable anamnesis, who have various somatic, primarily allergic, pathologies [3,4,6].

Recently, the attention of scientists and doctors has been increasingly attracted by the problem of food allergies in children.

Modern data confirm the multifactorial nature of the etiology of AD. These children have an increased risk of bacterial and fungal skin infections. It has been established that sensitization of the body due to the antigenic activity of Staphyloccocus aureus microbial superantigens can cause exacerbation of AD, Staphyloccocus aureus is found in 80% of patients with AD.

AD is an allergic skin disease belonging to the group of chronic diffuse neurodermatitis, while the immune and nervous systems, as well as internal organs, are involved in the pathological process. That is why atopic dermatitis is now considered as a systemic disease. Reducing the resistance of the skin barrier to pathogenic and opportunistic resistant flora is complicated by atopic rashes. The bacterial flora of the skin in patients with AD is significantly different from the microflora of healthy people. In healthy people, the number and species composition of autoflora microbes are relatively constant, but small deviations in the state of health change this balance due to the suppression of protective factors, while the

number of microbes increases and microbial species unusual for a healthy organism appear. These changes occur even in the absence of clinical signs of damage. The pathogenesis of complicated forms of AD is closely related to the state of the child's immune system [5]. Numerous studies have shown that immune deficiency, violation of the stratum corneum and the water-lipid mantle of the epidermis, the presence of entry gates for infection, an imbalance in the autoflora of the skin with a predominance of Staphylococcus aureus and Candida are the causes of the development of infectious complications of AD.

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Stage 3 - moderate to severe AD. In severe AD, it is more reasonable to prescribe topical corticosteroids with moderate or high activity than systemic and / or local calcineurin inhibitors.

Stage 4 - refractory severe blood pressure. It is extremely rare in children. Recommended systemic therapy (cyclosporine) or ultraviolet irradiation (children - only after 12 years).

Preparations recommended as restoration and protection of the skin barrier should be applied not only to the affected areas, but also to the entire often genetically problematic skin in order to level its dryness [1, 3]. It should be noted that first-stage drugs solve not only therapeutic, but also preventive tasks. Their application is the most important, but at the same time, these appointments are the least correctly carried out, and sometimes undeservedly ignored. With long-term use of drugs, there should be confidence not only in their individual efficacy and tolerability, but also in safety. This can be evidenced by evidence-based studies and the duration of "uncompromised life" among pharmaceuticals in this direction.

Currently, a large number of emollients for medical and cosmetic care are offered with extensive complexes of various forms. Emollients are fats and fat-like substances that can create a protective lipid layer on the surface of the skin. They can be used 30 minutes after the application of topical steroids. It is important that all ingredients are physiologically neutral, as the skin of the child has a high absorbency.

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