



GLOBAL PREVALENCE OF ALLERGIC DERMATITIS IN THE CHILDREN'S POPULATION

Ashurova Dilfuza Tashpulatovna

MDs, Professor,

Yuldasheva Yulduz Khabbibulla Kizi - PhD,

Sadikova Arofat Mukhiddin Kizi - PhD

Tashkent State Medical University, Tashkent, Uzbekistan

Abstract

Allergodermatitis (primarily atopic dermatitis) is one of the most common chronic allergic diseases of childhood. According to international epidemiological studies, the prevalence of the disease among children in different countries ranges from 5 to 30%, which is associated with genetic characteristics of the population, environmental factors, level of urbanization, and lifestyle. The highest prevalence of allergic dermatitis is observed in economically developed countries of Europe, North America, Australia, and East Asia. According to the International Association of Skin and Aesthetic Counselling (ISAAC) program, Study of Asthma and Allergies in Childhood), symptoms of atopic dermatitis are found in 15–20% of school-aged children in developed countries. In some regions of the UK, New Zealand, and Australia, the rate reaches 25–30%.

In European countries, the prevalence of atopic dermatitis among children averages 10–20%. In Northern Europe, the rates are slightly higher than in southern countries. In Germany, the United Kingdom, Sweden, and Denmark, the disease is diagnosed in one in five children. In Eastern European countries, the prevalence is somewhat lower, but an upward trend has been observed in recent decades.

In North America, atopic dermatitis is diagnosed in approximately 10–18% of children. In the United States, the disease is among the most common chronic childhood diseases. Research shows that the incidence of allergic dermatitis has increased almost two- to threefold over the past 30–40 years.



Significant variability in prevalence rates is observed across Asian countries. In Japan, South Korea, and Singapore, prevalence reaches 15–20%, while rates remain lower in rural areas of China and some Southeast Asian countries. Increasing urbanization and lifestyle changes are contributing to the growing number of patients with allergic skin diseases.

In African and Latin American countries, the prevalence of allergic dermatitis was traditionally considered lower, but recent studies indicate a gradual increase in cases. In large cities in these regions, rates are already approaching European levels, reaching 8–15%.

The steadily increasing incidence of these diseases is particularly alarming. According to the World Health Organization, the prevalence of allergic diseases, including allergic dermatitis, has increased significantly in many countries over the past decades. This increase is believed to be driven by environmental pollution, changing diets, decreased exposure of children to microorganisms at an early age (the hygiene hypothesis), widespread use of antibiotics, and an increase in household allergens.

Age-related factors also play a significant role. Approximately 60% of children experience their first symptoms of allergic dermatitis within the first year of life, and 85–90% of patients develop the condition before age five. Although symptoms subside with age in some children, many patients continue to experience the condition into adolescence and adulthood.

Keywords: Allergodermatitis, atopic dermatitis, children, prevalence, epidemiology, allergic diseases, allergopathology, risk factors, children's health, atopy, immune system, urbanization.

The aim of the study was to examine current data on the prevalence of allergic dermatitis in children worldwide, identify the main factors influencing the development of the disease, and assess its medical and social significance for the child population.



Research objectives

To analyze the scientific literature on allergic dermatitis in children. To study the prevalence of allergic dermatitis among children in various countries and regions of the world. To identify the main risk factors for the development of allergic dermatitis in children. To examine the age-related characteristics of the onset and course of the disease. To assess the influence of environmental, genetic, and social factors on the prevalence of allergic dermatitis. To study current trends in the increasing incidence of allergic skin diseases in children. To analyze the impact of allergic dermatitis on the quality of life of children and their families. To summarize current approaches to the prevention and early detection of allergic dermatitis in children.

Object of study: Children suffering from allergic dermatitis.

Subject of research. Epidemiological features, prevalence and risk factors for the development of allergic dermatitis in children in different countries of the world.

Research methods. To achieve this goal, the following research methods were used:

Bibliographic method – analysis of domestic and foreign scientific literature devoted to the problem of allergic dermatitis in children.

Systematization and generalization of data – study of the results of epidemiological studies, materials of the World Health Organization and international programs for the study of allergic diseases.

Comparative analysis – comparison of prevalence rates of allergic dermatitis among children in different countries and regions of the world.

Statistical analysis of literary data – assessment of the incidence of the disease and trends in its spread.

Analytical method – study of the influence of genetic, environmental and social factors on the development of allergic dermatitis in children.



Study results. The analysis revealed that allergic dermatitis is one of the most common chronic allergic diseases in childhood. Its prevalence among children worldwide ranges from 5% to 30%.

The highest incidence rates have been found in Europe, North America, Australia, and East Asia, where signs of atopic dermatitis are observed in 15–20% of children. In some regions, the prevalence reaches 25–30%.

It has been established that over the past decades, many countries around the world have seen a steady increase in the number of children with allergic dermatitis. The main causes of this increasing prevalence include urbanization, environmental pollution, dietary changes, exposure to household allergens, and disruption of the intestinal microbiota.

An analysis of age characteristics showed that the first manifestations of the disease in most patients occur in early childhood: approximately 60% of children develop symptoms within the first year of life, and 85–90% before reaching the age of five.

The study also showed a significant influence of genetic predisposition. Parental allergies significantly increase the risk of developing allergic dermatitis in a child. In addition, it has been found that allergic dermatitis has a negative impact on the quality of life of children and their families, leading to sleep disturbances, emotional discomfort, decreased social activity and the need for long-term medical monitoring.

The obtained results confirm the relevance of the problem of allergic dermatitis in children and the need to improve preventive measures, early diagnosis and comprehensive treatment of this disease.

Conclusions

Thus, allergic dermatitis is one of the most common allergic pathologies in childhood worldwide. The increasing incidence, early onset, and significant impact on the quality of life of children and their families make the problem of allergic dermatitis an important medical and social issue in modern pediatrics and allergology.



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