



## **ALLERGIC DISEASES IN CHILDREN**

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### **Abstract:**

Allergic diseases are a global public health problem. Allergic rhinitis is the most common in both paediatric and adult populations. According to WHO data, more than 40% of the population in developed countries have signs of allergic readiness. Currently, the incidence of allergic rhinitis in the general population is 10-20% and these figures tend to further increase this disease. This disease limits the life activity of children, reduces their social and physical activity, as well as their quality of life and general well-being in general [6]. According to the results of epidemiological studies, allergic rhinitis affects about 20% of the population of all age groups. According to various data, 54-75% of patients with allergic diseases have a hereditary predisposition. The relationship between the course of AR and the functional state of the autonomic nervous system (ANS), peculiarities of vegetative changes in different forms and severity of the disease course, their dynamics under the influence of various methods of treatment, targeted correction, morphological changes in the nasal cavity tissues taking into account the initial vegetative tone (IVT) of the organism are not properly reflected .

**Keywords:** Allergic diseases, children, allergic bronchitis, bronchial asthma

**INTRODUCTION.** Allergic morbidity is increasing in the world, both among adults and children. According to world data, allergic diseases affect 30-50% of the population. In fact, it is the epidemic of the 21st century. Only in Europe more than 150 million people suffer from allergic diseases, half a billion of them - allergic rhinitis, more than 300 million - bronchial asthma.

Nowadays the concept of "allergic march" is widely used - having debuted in childhood, the pathology can accompany a person throughout his life. Allergic reactions develop in a sensitized organism, i.e. at repeated contact with an allergen. The allergic reaction is further accompanied by the development of allergic inflammation and the appearance of symptoms.

In all cases when allergic diseases are suspected, it is necessary to collect as detailed anamnesis as possible - symptoms, presence of dermatitis, urticaria, rhinitis, conjunctivitis, presence of heredity, intensity, seasonality, remissions and relapses.

Atopy is defined as a genetic predisposition to produce excessive amounts of antibodies -immunoglobulin E in response to contact with environmental allergens. Aggravated heredity can be traced in about 80% of patients. Environmental factors that contribute to the development of allergic reactions - preservatives, dyes, detergents, perfumes, heavy metals in exhaust gases, psychogenic effects - are also important.

The first thing a child most often meets with is atopic dermatitis

Multifactorial skin disease, which is characterized by itching, chronic recurrent course, age-specific localization and morphology of lesions. In typical cases, it begins at an early age, may continue throughout life and significantly disrupts the quality of life of the patient and his family members, may lead to disability. It is often combined with other allergic diseases - allergic rhinitis and bronchial asthma.

There is no universally recognized classification of atopic dermatitis.

Diagnosis is made predominantly on clinical findings:

- itching of the skin;
- morphology: redness, papules, microvesicles on the face and extensor surfaces of the extremities at early age up to 2 years.
- papules, thickening (lichenification) of the skin in symmetrical areas of flexor surfaces in older children.
- early manifestation of symptoms
- chronic recurrent course
- hereditary aggravation
- itching of the skin;
- morphology: redness, papules, microvesicles on the face and extensor surfaces of the extremities at early age up to 2 years.
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- early manifestation of symptoms



- chronic recurrent course
- hereditary aggravation.

From 2021, updated EU requirements for infant formulae will be issued:

2-stage hydrolysis will be mandatory, + use of functional components. Administration of lactobacilli to mothers during pregnancy and lactation has been shown to reduce the incidence of atopic dermatitis in children, but does not reduce the incidence of IgE sensitization. The efficacy of probiotics is more proven in children born by caesarean section. Breastfeeding mothers are restricted to high-trigger foods only. Late introduction of complementary foods (older than 6 months) does not have a preventive effect on the development of allergies, introduce mono-component products, no more than one product per week. Products with high allergenicity - milk, gluten are introduced after 6 months of age.

The next allergopathology is allergic rhinitis

According to WHO data, the prevalence of allergic rhinitis:

Children 6-7 years old - up to 20%, 13-14 years old - 33%, 15-18 years old - 34%, more often boys are sick.

Allergic rhinitis can be:

- seasonal (plant pollen)
- Year-round (household allergens)
- epidermal (to animals)

The division is rather conventional.

The main symptoms:

- Rhinorrhea (clear discharge),
- Sneezing (often episodic),
- Itching or burning in the nose (sometimes accompanied by itching of the palate and pharynx),
- Nasal congestion (mouth breathing, apnea, snoring, nasality).

Non-specific symptoms include weakness, malaise, headaches, sleep disturbances, depressed mood, and rarely fever.

Allergic rhinitis due to pollen can be associated with food allergy - itching, burning, swelling due to cross-allergy.

Another formidable manifestation of allergies is bronchial asthma

Bronchial asthma is characterized by chronic inflammation of the respiratory tract and is diagnosed by respiratory symptoms of wheezing, shortness of breath, chest tightness or cough, variable in duration, intensity, combined with reversible airway obstruction.

Bronchial asthma currently affects about 334 million people, approximately 14% of whom are children, adolescents - 20% at 15 years of age and 7.2% at 18

years of age. The mortality rate is approximately 3 per 1 million people.

The mechanism of bronchial asthma is airway hyperactivity and inflammation in response to an allergen. Allergic and non-allergic forms are distinguished. In non-allergic - no specific IgE is found. However, over time, some people do develop IgE dependence.

The key point in the diagnosis of bronchial asthma in children is the presence of a history of recurrent episodes of wheezing (usually more than 3), the presence of atopy (allergic rhinitis, atopic dermatitis, food allergy) and an aggravated family history. Assessment of pulmonary function - spirometry (performed after 4 years of age), skin testing or determination of specific antibody titer of class IgE in serum, sometimes chest radiography (to exclude other diseases), assessment of bronchial hyperactivity, such as exercise test.

The necessary components of the diagnosis of allergic disease are:

- anamnesis - confirming the role of allergens in the manifestation of disease symptoms,
- physical examination.

If the suspected allergic nature of the disease requires mandatory confirmation of sensitization by detecting allergen-specific IgE antibodies - skin testing or laboratory tests performed by an allergist.

**CONCLUSIONS:** Thus, further treatment when the disease is detected is determined by the attending physician, it includes prescription of the necessary diet, drug therapy and allergen-specific immunotherapy (ASIT), which has a really therapeutic effect and the experience of its use has already more than a century. It is the only pathogenetic therapy for the treatment of allergies in both children and adults.

#### **LITERATURE:**

1. Alimentary prevention of food intolerance in newborns and breastfed children of the first year of life/ V.A. Tutelyan, I.Y. Kon, E.M. Fateeva et al. - Moscow, 2005 - 14 p.
2. Allergic diseases in children: peculiarities of cytokine and immune status/ E.V. Prosekova, V.V. Derkach, T.N. Shestovskaya and dp.il Immunology.- 2007.- Vol. 28.- No. 3,- P. 157-161.
3. 3.Belitskaya M.Y. Treatment of allergic skin lesions in children of the first year of life, being



- on natural feeding / M.Y. Belitskaya P Rossiiskiy vestnik perinatologii i pediatriiia.-2005.- No. 2.- C. 45-47.
4. Borovik T.E. Modern dietotherapy in allergic diseases in young children/ T.E. Borovik, V.A. Revyakina, S.G. Makarova, O.L. Lukyanova// Russian Allergological Journal.- 2006.- No. 1.- P. 39-46. 39-46.
  5. Balabolkin I. I. Modern concept of pathogenesis and principles of therapy of allergic diseases in children // Paediatrics. -M., 2003. -№4. -C. 52-57.
  6. Balabolkn I-I. Bronchnallia asthma in children M. Medicine, 2003. C. 34-46. 277-279
  7. Ilyina N.I. // Russian Journal of Allerology. - 2004. V' I P.37-41.
  8. I.I. Ryumina, M.M. Yakovleva, Rus med journal, 19(3), 146-149 (2011).
  9. M.M. Gubin, G.V. Azmetova, Pharmacy, 7, 40-48 (2008)
  10. D.Y. Ovsyannikov, L.V. Pushko, Allergic rhinitis in children: teaching method. manual
  11. for the study of the course "Children's diseases" (Publishing house of RUDN, M.,2012)