

## **ALLERGY. THE 21-ST CENTURY ILLNESS**

Presentation provides information of the causes, treatment, symptoms and preventive methods of the allergy. "The Age of Allergy". So doctors call our century. According to the World Health Organization, allergy infects every fourth inhabitant of the Earth today, but the number of patients is increasing. Where is this disappointing trend?

**1. What is allergy?** Allergy is an increased sensitivity ("hypersensitivity") altered reaction of the human body to the influence of certain factors (allergens). Hypersensitivity (allergy) means that the immune system of the body, which protects against infections, diseases and foreign bodies, reacts to the allergen with a violent reaction and excessive protection on completely harmless substances. Immunoglobulins, blood cells that circulate immune complexes, biologically active substances are involved in the development of allergy. The term "allergy" was introduced by the Austrian pediatrician K. Pirke in 1906. Allergy is a global medical problem, because about 25% of the population of some industrial areas suffers from some kind of allergic disease. The number of allergy cases is steadily increasing worldwide, the number of not only allergic reactions has increased, there has been a large number of severe conditions with respiratory failure, skin and mucous membranes, joints, lymphatic system, etc.

Official statistics say that 1.5% of Ukrainians are allergic to allergies, but not less than 25% are real patients, doctors are convinced. And in large, "environmentally compromised", cities this indicator reaches 30%. According to physicians, the main cause of allergy is the pathology of the immune system, and most children and the elderly suffer from an illness. If the mother has an allergy, then the probability of developing a child's illness is 50%, says Professor Boris Pukhlik, the president of the Association of Allergists of Ukraine. And when both parents are allergic, in 85% of cases the child is at risk of "inheriting" the diagnosis. However, not only the genetic factor leads to allergies, but also the influence of external allergens that affect the health of everyone. And the modern person lives in an environment that is literally full of allergens. So we are all at risk, Boris Pukhlik warns.

**2. Causes of allergy.** All that surrounds us can cause allergies: household chemistry, animal wool, food products, pollen plants, mold, insects, latex, medicines, household dust, feathers, cosmetics, alcohol, seafood, even cold and sun rays. The development of allergy begins with the release of histamine in the blood. This causes irritation of the mucous membrane of the nasopharynx, begins running nose and sneezing, swelling appears. The nature of allergy is largely a mystery. Allergies can suddenly occur and just as suddenly pass. But basically, the nature of the allergy is immunological, and hides in violation of the regulation of the immune response. In addition, the predisposition to one or another type of allergy is transmitted inherited, so if one of the parents suffers from allergies, there is a 25% chance that his child will

develop an allergy. At present, there is a tendency for self-administration of a large number of medications simultaneously from various pharmacological and therapeutic groups, which leads to the development of allergies. This has led to the development of many new diseases and complications. Food allergens. They can be food or substances that are formed during digestion, culinary processing, long-term storage. The most commonly used food allergens include coffee, cocoa, chocolate, citrus fruits, strawberries, eggs, meat from animals and birds, honey, fish, which are believed to have the most pronounced allergenic activity (animal and vegetable proteins), caviar, crabs, crayfish, milk, carrots, beets, tomatoes, buckwheat, cereals (rye, wheat, millet, rice, corn), legumes, nuts. Household allergens. These include mainly domestic dust allergens, feathers of pillows, and library dust.

**3. Symptoms of allergy.** Allergies have the following symptoms: runny or tearing, recurring dry night cough, wheezing in the lungs and breathlessness, itching, throat irritation, rash and other skin reactions. Allergy is characterized by pronounced clinical polymorphism. In the process of allergy can be drawn any tissue and organs. In the development of allergy, skin cover, gastrointestinal tract, respiratory system are more often affected. Allergic reactions of immediate and delayed type are distinguished, however, such distribution of allergy is largely conditional.

**4. Treatment of allergy.** The best method of treating an allergy is to find out its cause and, if possible, avoid contact with this allergen. If you want to determine the cause of an allergy, then you need to contact a dermatologist or an allergist. If you do not identify the cause of the allergy, you can choose symptomatic treatment. Symptoms of allergy caused by the release of a chemical called histamine (one of the inflammatory mediators) and antihistamines are an effective method of treating allergies. Further, there is no method of treatment that completely cures for allergies, so the fight against allergic diseases consists either in suppressing the very reaction of immunity, or in neutralizing substances that are formed when allergies cause inflammation. However, with proper treatment of allergy, its manifestations can be minimized.

**5. How to prevent an illness?** First of all – to strengthen immunity. According to physicians, there are no special secrets: it is necessary to rest, to do sports, to organize a healthy diet and to limit as much as possible contact with substances that provoke an allergy. At least at the household level. Nowadays there are two fundamentally different ways to treat allergies. The first, which is used antihistamines, hormones, relieves the symptoms of the disease. Such drugs work only for a short time – say, within 24 hours, when you breathe nicely or remove bronchospasm. However, they do not eliminate the very causes of the disease. The second method is more powerful, because it allows you to eliminate the problem. It is about the therapy of “causal agents”, that is, allergens. Treatment with allergens, according to the president of the Association of Allergists of Ukraine, lasts for an average of three years. But already in the first year it costs almost twice or three times cheaper than pharmaceutical therapy, which only eliminates symptoms. The following courses (second, third year of therapy) are cheaper by almost five times. While treating with anti-allergic drugs, you need a lifetime, gradually increasing the therapeutic dose, since it is addictive.

Everyone can choose: drink a pill and get tangible, but temporary relief, or a few years to be treated with allergens: one or two pills a week. By the way, the second way of treatment of allergy is now advocated by the European Academy of Allergology and Clinical Immunology. At the same time, allergen therapy is effective only if you have come to the doctor in time – after the first symptoms.

According to social surveys, 68% of Ukrainians aged 20 to 65 do not reflect on the question: “Are the safe laundry powders used by your family?” At the same time, it is just the anionic active substances, phosphates that are part of synthetic detergents, one of the most dangerous to health. By interacting with our body, substances contained in household chemicals help reduce immunity, lead to the development of skin and respiratory allergic diseases. So, it’s important to pay attention to the ingredients contained in the synthetic detergents that we use at home.

## **REFERENCES**

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