### THE LATEST PEDAGOGICAL AND PSYCHOLOGICAL INNOVATIONS IN EDUCATION. International online conference.

Date: 9<sup>th</sup>March-2025

THE ORIGIN OF ALLERGIC DISEASES AND THE MEDICINES USED IN THEIR TREATMENT

To'laganova Nigora

Teacher of public health technical college named after Republic No. 1 Abu Ali Ibn Sina

**Annotation:** Allergic rhinitis is an acute or chronic inflammatory disease of the nasal mucosa, which occurs due to an overreaction of the immune system to allergens that enter the respiratory tract. The allergens that cause this disease include dust, animal dander, mold spores, plant pollen, etc. Allergic rhinitis is the most common type of rhinitis and is associated with other allergic conditions such as conjunctivitis, atopic dermatitis, or asthma.

Key words: allergy, dust, pollen, dermatitis, disease, asthma.

The substance that causes an allergic reaction is called an "allergen." Allergens can be found in food, drinks, and all kinds of substances in the environment. Most of them are harmless, that is, most do not cause allergies. The response to an allergen occurs either immediately or gradually through hypersensitivity. When an allergen enters the body, both true and false (pseudoallergic) allergic reactions can occur in response to it.

Before the onset of a true allergic reaction, a certain period passes, during which the body's sensitivity to the substance that first came into contact with it increases, which is called sensitization. The occurrence of sensitization is due to the appearance in the body of specific protein substances - antibodies or lymphocytes that can interact with the allergen in response to the first allergen that came into contact with it. If the allergen has been eliminated from the body before it appears, no symptoms of the disease will be observed. If the allergen is not eliminated or enters the body again after it has been eliminated, it interacts with antibodies or lymphocytes in the heart and causes an allergy. As a result, a number of biochemical processes occur, producing a number of substances such as histamine and serotonin, which damage cells, tissues and organs, thus causing a specific reaction, that is, a reaction in response to an allergen that has previously affected the body, and an allergic disease occurs. False reactions occur when the body first encounters the allergen. There is no sensitization period. False reactions often occur to drugs and foods. An allergic disease does not always occur when the body encounters an allergen. Because heredity, the nervous and endocrine systems play an important role, the disease is mainly caused by a malfunction of these systems and the occurrence of severe psychological symptoms. Prevention of allergies consists in taking measures to prevent the repeated entry of sensitizing substances into the body and the disruption of the body's protective functions. As we all know, the immune system protects the body from foreign influences.

Immunoglobulins produce protective proteins in the body. In humans, immunoglobulin E increases in the blood in response to external influences (tree pollen, house dust, household chemicals, animal hair, plant pollen, plant proteins, fungi). In some



### THE LATEST PEDAGOGICAL AND PSYCHOLOGICAL INNOVATIONS IN EDUCATION. International online conference.

## Date: 9<sup>th</sup>March-2025

people, an increase in the amount of immunoglobulin E causes an increase in histamine and histamine-like substances in our blood and the occurrence of an allergic reaction. Hereditary predisposition plays a major role in the development of allergies. If one of the parents suffers from allergies, the child's risk of developing allergies is 30-40%, and if both parents have allergies, the probability of developing the disease in the child can increase to 70-75%. When treating allergic diseases, we need to pay attention to the time of onset of the disease. This is very important for allergic diseases, as the faster the disease develops, the more dangerous it is for the body. Since allergies are chronic diseases, it is very difficult to completely eliminate allergies from the body.

A widely used treatment method for allergies is immunotherapy. The amount of allergen is increased during the course of treatment. During this treatment, the allergic disease is reduced or completely cured. Treatment with chemical drugs helps to eliminate allergy symptoms, but it cannot cure it completely. Before using any medication, you should consult a doctor. Allergy medications include antihistamines: they are part of the allergic reaction and stop the action of histamine produced in the body. Some antihistamines are not suitable for children. As we have already said, drugs used to treat allergies are temporary, either externally (ointments, gels), or internally through injections and tablets. These include; ketotifen, lorathal, zodak, allergy, fenical, calcium gluconate, dectamitazone, dimedrol, prednisolone, suprastin, thiosulfate, hydrocortisone. Let's look at some of them. Currently, the most common ketotifen tablet contains the active ingredient ketatifen. 1 tablet contains lactose, monohydrate, microcrystalline cellulose, magnesium stearate, talc, anhydrous colloidal silicon dioxide. Ketotifen belongs to the group of cycloheptothiophenones and has a pronounced antihistamine effect.

Its mechanism of action is to inhibit the release of histamine and other mast cell mediators. The active ingredient of phencarol is xifenadine, the formula is C20H23NO

In short, an allergy is an allergic reaction to a foreign substance. An increase in histamine in the body leads to an exacerbation of allergic diseases. Antihistamine properties are anti-histamine, that is, they reduce histamine in the body. Any product consumed in excess can subsequently cause allergies.

### **REFERENCES:**

1.Seidman MD, Gurgel RK, Lin SY, et al. Clinical practice guideline: Allergic rhinitis. Otolaryngol Head Neck Surg.2015; 152(1 Suppl): p.S1-S43. doi: 10.1177/0194599814561600

2. Greiner AN, Hellings PW, Rotiroti G, Scadding GK. Allergic rhinitis. Lancet. 2011 Dec 17;378(9809):2112-22. doi: 10.1016/S0140-6736(11)60130-X. Epub 2011 Jul 23. PMID: 21783242.

3. Duong QA, Pittet LF, Curtis N, Zimmermann P. Antibiotic exposure and adverse long-term health outcomes in children: a systematic review and meta-analysis. J Infect.2022. doi: 10.1016/j.jinf.2022.01.005.

4. Williams PB, Dolen WK, Koepke JW, Selner JC. Comparison of skin testing and three in vitro assays for specific IgE in the clinical evaluation of immediate hypersensitivity.

ERNATIONA

# THE LATEST PEDAGOGICAL AND PSYCHOLOGICAL INNOVATIONS IN EDUCATION. International online conference.

Date: 9<sup>th</sup>March-2025 Ann Allergy. 1992 Jan;68(1):35-45. PMID: 1736718.

International Conference Proceedings

