



“OTORHINOLARYNGOLOGICAL DISEASE: ALLERGIC RHINITIS”

Toshkent Kimyo Xalqaro Universiteti

Ilmiy rahbar: **Raxmonov Otabek Rasulovich.**

Tibbiy-fundamental fanlar assistenti

Muallif: **Shernazarov Asomiddin Ravshanvich**

Toshkent Kimyo xalqaro universiteti

Davolash ishi 2-kurs talabasi

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Aim and Objectives of the Study:

Allergic rhinitis is a chronic inflammatory disease of the nasal mucosa that develops as a result of hypersensitivity to allergens. The aim of this study is to conduct a scientific analysis of its causes and symptoms, to evaluate the effectiveness of modern diagnostic and treatment methods, to review statistics from the last three years, and to identify the factors influencing the development of allergic rhinitis. Furthermore, the complications of the disease and preventive strategies are also considered.

Materials and Methods:

For diagnostic purposes, all patients underwent general laboratory and specific allergological examinations. Complete blood count results were evaluated to determine the presence of eosinophilia. In addition, the patients' total and specific immunoglobulin E (IgE) levels were measured, which helped confirm allergic sensitization. Examination of the nasal cavity focused on the degree of nasal obstruction and rhinorrhea (nasal discharge). Blood tests were carried out to determine the level of immunoglobulin E (IgE) responsible for allergy, using the ELISA (Enzyme-Linked Immunosorbent Assay) method. Moreover, common allergens (pollen, mold) were identified using a prick test.

Results and Discussion:

Immunological mechanisms play a crucial role in allergic rhinitis, and elevated IgE levels are directly associated with disease symptoms. The ELISA test has once again been confirmed as a reliable and accurate diagnostic method for allergic rhinitis. During the study, the distribution of patients by age, gender, type, and duration of the disease revealed the following findings:

By age groups: allergic rhinitis was most prevalent in the 13–30 age range, accounting for 60–70% of cases, with the peak incidence in this age group.

Among older individuals, the prevalence was about 30–40%, depending on allergen exposure and disease progression.



In the general population, seasonal allergic rhinitis was diagnosed in 60–70% of cases, while persistent (perennial) rhinitis accounted for 30–40%.

On a global scale, allergic rhinitis affects 10–30% of the world's population.

Pathophysiologically, the disease is characterized by hyperemia (redness of the mucosa), hypertrophy of mucosal glands (resulting in increased mucus production), capillary dilation, and increased vascular permeability, leading to edema. Histologically, epithelial hyperplasia, eosinophil accumulation, vascular changes, and glandular hypersecretion are observed. In long-standing cases, fibrotic changes and nasal polyp formation may occur.

Therapeutically, allergen-specific immunotherapy (ASIT) has been shown to provide long-term results and reduce the likelihood of recurrence.

Conclusion:

The prevalence, clinical features, and diagnostic markers of allergic rhinitis were studied. This disease is not limited to nasal symptoms but also negatively affects sleep quality. Although allergic rhinitis cannot be completely cured, its symptoms can be significantly reduced. A cleaner ecological environment is associated with a lower risk of allergic rhinitis.