

CLINICAL ALLERGOLOGICAL FEATURES OF SEASONAL ALLERGIC
RHINITIS IN ADOLESCENTS

Tukhtaeva O.T.

Tashkent Pediatric Medical Institute

Annotation: Seasonal allergic rhinitis with of the disease beginning of plants flowering to the period correct If a person body the disease brought releasing to the allergen , that is this of the plant flower to dust very sensitive if so , then in cases of the disease clinical signs develops. Seasonal allergic rhinitis current on the day whole world along this including In Uzbekistan also wide widespread seasonal, clinical to the character has was allergic disease is considered.

Key words: allergens , allergic rhinitis , predisposing factors , children .

Allergic rhinitis is nose mucus floor disease is , its basis because of cause from allergens come came out allergic is inflammation. Seasonal allergic rhinitis clinical signs of the year known in times appearance will be and often known of plants flower dust with communication to do as a result to the surface is coming .

Plant to dust sensitization appearance to be (pollinosis) different clinical in appearance to be Possible : allergic rhinitis , allergic conjunctivitis , bronchial asthma . In patients with sensitization, other allergic conditions (atopic dermatitis , laryngitis) may occur. tracheitis , intersection reaction , chronic (causing blisters) release possible [1,2, 5,6].

Seasonal allergic rhinitis has a seasonal nature , and the onset of the disease is mainly associated with the flowering of certain allergenic plants. with The disease develops in cases where the human body is highly sensitive to the allergen that causes the disease, that is, to the pollen of this plant [3,4,7,10]. The factors that cause seasonal allergic rhinitis in adolescents are different, and mainly contact with the causative allergen causes the disease, in addition, several factors also play an important role in the development of the disease, for example; pungent odors, constant smoking of parents near children, diseases of the organs, cold weather, etc. The factors that cause seasonal allergic rhinitis in adolescents are different, and mainly depend on the place of residence of the child and the sensitivity of the organism [4,8,9,10].

Objective: To study the clinical and allergological characteristics of seasonal allergic rhinitis in adolescents living in Tashkent .

Materials and methods . We studied children in our study by dividing them into 2 groups: the main group consisted of 60 children with a diagnosis of seasonal allergic rhinitis and the comparison group consisted of 40 children with a diagnosis of allergic rhinitis with symptoms observed throughout the year.

In the main group, there were 32 girls (53.3%) and 28 boys (46.7%), in the comparison group there were 23 girls (57.5%) and 17 boys (42.5%). Children in the main and comparison groups were examined according to generally accepted rules. The diagnosis of

allergic rhinitis was made according to the International Classification of Diseases, 10 th edition.

Plant pollens that cause seasonal allergic rhinitis must have the following characteristics: the plants must produce large amounts of pollen; the pollen must be light and volatile to be spread over long distances by wind and insects; the plants, trees, and pollens that spread such pollen must be widespread in a certain geographical area; the pollen must have specific allergenic properties.

Examination methods : 1. Allergo anamnesis 2. Skin tests - prick tests. 3. Spirometry. Allergoanamnesis was taken from all children in our study, and questionnaires were administered to the children. The questions in the questionnaire were filled out individually by the children. The questionnaires were administered in 2 stages before and after treatment. During the allergyanamnesis, information was also collected about the allergic diseases of the parents . A “ + ” was put for a positive answer .

Seasonal allergic rhinitis in children in Tashkent is caused by complex pollinating trees and flowers, which bloom most often in late February and early March. Such plants and trees mainly include almond and walnut trees, birch and beech, in addition, allergy to wormwood and cherry flowers was 58.6%. In our observation, 40.3% of children had hypersensitivity to timothy in the summer months.

The pathogenesis of seasonal allergic rhinitis in children of the Asian group is mainly IgE-dependent type I allergic reactions. When the allergen comes into contact with the body, the immunocompetent cells of the mucous membrane, Th2-lymphocytes, secrete biologically active regulatory proteins, interleukins, and produce IgE antibodies to mast cell receptors, mucosal basophils and other cell receptors, monocytes, eosinophils and B cells. As a result of the body's re-contact with the allergen, an allergic reaction develops.

In adolescents , seasonal allergic rhinitis is caused by plant pollen allergens, and clinical symptoms predominate. In the main group of children in our study, sensitization to 2 or more groups of pollen allergens was detected in 79.8% of cases, and to pollen of complex pollinating plants and flowers and trees in 54.7%.

the causative allergens were identified using skin tests (scarification tests) and allergy tests, the most frequently identified allergens in children living in Tashkent were almond and walnut trees, birch, and wormwood .

Causative allergens causing seasonal allergic rhinitis in adolescents

1. Table

| Causative allergens | Absolute number | % |
|---------------------|-----------------|------|
| Almond | 11 | 18.3 |
| Walnut | 10 | 16.6 |
| Birch | 9 | 15 |
| Beech | 8 | 13.3 |
| Timofeevka | 8 | 13.3 |

| | | |
|--------------|-----------|------------|
| Pauline | 7 | 11 |
| Leafhopper | 4 | 6.6 |
| Ryegrass | 3 | 5 |
| Total | 60 | 100 |

The similarity in pollen of fruits and some plants and the formation of antibodies with reagins that cross them cause the development of pollinosis and the development of the clinic of food allergies. Clinical polymorphism is characteristic in adolescents, and clinical symptoms manifest differently. Seasonal allergic rhinitis in adolescents often occurs in combination with allergic seasonal conjunctivitis (34%), inflammation of the respiratory tract, skin rashes (5.6%) and damage to internal organs (2.9%).

In our observation, adolescents (in Tashkent) developed seasonal allergic rhinitis mainly from birch, walnut, almond and other tree and plant pollen. In the summer and autumn, it was found that pollen from difficult-to-pollinate plants and trees caused the disease; sensitivity to sunflower, sedge, and ragweed was at high levels.

It was found that even after the end of flowering, high levels of IgE in the blood serum of adolescents (15-18 years old) persisted. The results of our studies showed that an increase in total IgE in the blood serum of 97.9% of the children under our observation was detected. The highest indicators were observed in adolescents with high (+++ or ++++) skin tests, and in adolescents with polysensitization, it was found that the disease was severe and led to severe complications. Even after the end of flowering, high levels of IgE in the blood serum of adolescents, especially in the older (15-18 years old) group, were observed with the persistence of disease symptoms.

The significance of hereditary predisposition in the development of seasonal allergic rhinitis in adolescents was confirmed by analyzing the monthly anamnesis collection, which was 68.3% (in 36 children) depending on the frequency of the disease. Out of 60 children, 43.3% (in 23 children) were determined by the mother, 32% (in 17 children) by the father, and 24.5% (in 13 children) by both parents. Most of the parents also had bronchial asthma, pollinosis, atopic dermatitis, urticaria, Quincke's edema, food allergy, drug allergy. According to the results of our allergic anamnesis, seasonal allergic rhinitis in children was confirmed to be accompanied by atopic dermatitis, atopic bronchial asthma, food allergy, and recurrent urticaria . Seasonal allergic rhinitis was found to be present in 44% of children before the onset of the disease to citrus fruits, honey, nuts, chocolate, cow's milk, fish, eggs, and many fruits and vegetables .

It was proven that food allergens, along with plant pollen, have common antigenic determinants in the main group of children . A higher sensitivity to complex pollinating plants has been confirmed in adolescents.

According to the results of allergological examinations, it was determined that with high sensitization to birch, allergic symptoms to walnuts were observed in 26.4% of adolescents, allergic clinical symptoms to apples - 21.9%, peaches - 12.1%, carrots - 9%, and potatoes - 4%.

Results. According to the results of the analysis, the causative factors of seasonal allergic rhinitis in adolescents were confirmed to fall on March-April. It was found that the peak of exacerbations is mainly associated with the flowering of complex pollinating plants in the spring and summer. The clinical forms of the disease were determined by the causative allergens and concomitant allergic diseases, and when accompanied by conjunctival symptoms, the disease often lasts longer, and the disease often causes severe complications.

Thus, it was determined that in adolescents living in Tashkent, allergens that cause seasonal allergic rhinitis are observed in the spring (56.1% of adolescents) and summer (37.4%).

According to the results of the analysis of the factors causing seasonal allergic rhinitis in adolescents under our supervision, the disease peaked in April . The peak of exacerbations was mainly caused by complex pollinating plants (84.2 %) ; the disease symptoms peaked in spring (56.1%) and summer (37.4%).

Conclusion. According to the results of the analysis of the factors causing seasonal allergic rhinitis in adolescents under our observation, it was confirmed that it occurs in March and April. It was found that the peak of exacerbations is mainly associated with the flowering of complex pollinating plants in spring (56.1%) and summer (37.45%).

It was found that the clinical forms of seasonal allergic rhinitis in adolescents are often associated with allergens causing the disease and concomitant allergic diseases, conjunctival symptoms, which often lead to a long course of the disease and the development of severe complications.

Literature

1. Abdullaev N . Ch . Tukhtaeva O . T . Nazarov O . A .- Features of clinical manifestations of dermatorespiratory syndrome in preschool children Scientific and Practical Journal " Pediatrics " No. 3 2022.
2. Allergic rhinitis. Clinical recommendations. M. , 2020.
3. Nazarov A.A., Tukhtayeva O.T. Oral allergy syndrome in children as a cross-reactivity phenomenon. *Pediatriyailmiyamaliyjurnali* 2019; 3: 73-77.
4. Nenasheva N . M. , Shilenkova V . V. Control of symptoms of allergy in adults in the Russian Federation : results - survey . *RMJ. Meditsinskoeobozrenie* . 2021; 5 (1): 25–31.
5. Revyakina V.A ., Dayxes N.A ., Geppe N.A . idr . *RADAR. Allergic reactions . Recommended algorithms for allergy prevention . 3rd edition, revised . M.: MediaMedichi , 2020.*
6. Xaitov M.R ., Namazova-Baranova L.S ., Chuchalin A.G . idr . *ARIA 2016: Modern management of medical anti-inflammatory drugs in the context of medical resistance. Rossiyskiyallergologicheskijjurnal* . 2017; 14 (3): 46–54.
7. Tukhtaeva O .T . Risk development chronology allergic diseases in children . *Pediatrics scientific and practical journal* 2019; 1: 60-65.
8. Tukhtaeva O.T ., Khidirova Sh.I . C borniknauchn ih trudov . *Mezhdisciplinarienproblemiedetskoyallergologii . Inaumno –prakticheskaya konferentsiya detskikh allergologigo vsmezhdunarodinumchastiem. Tashkent. 2019; 53.*

9. Fayzullina R.M ., ShangareevaZ.A ., SannikovaA.V . Control of symptoms of seasonal allergy in patients with opioid arrhythmia. Effective pharmaceutical therapy . 2022; 18 (37): 20–23. DOI 10.33978/2307-3586-2022-18-37-20-23
10. Federal clinical recommendations. Allergology. Edited by NI Ilyina , RM Khaitov . M. " Pharmarus print media". 2014: 110. /Federal Clinical Recommendations. Allergology. Ed. by NI Ilyina , RM Khaitova . M. Farmarus Print Media . 2014: 110.