MODERN APPROACH TO THE TREATMENT OF ALLERGIC RHINITIS IN CHILDREN

Bobokulova D.F
Bukhara State Medical Institute

Keywords: allergic rhinitis, chess, intellectual, neurovegetative, regulation, physical.

Annotation: among the topical issues of modern allergology, the problem of allergic rhinitis (AR) in children has a special place . Allergic rhinitis is one of the common allergic diseases of childhood. This disease is a global problem, because it has a high specific place in allergic pathology (60-70%) and is also common in children's population (10-15%), which emphasizes the importance of the problem.

In many countries of the world, the constant increase in the number of children with allergic rhinitis is caused by patients' misinterpretation of the symptoms of the disease, failure to consult a pediatric allergist in time, and failure to follow the diagnosis and treatment procedure in time. The most effective method of treating allergic diseases is allergen-specific immunotherapy (ASIT), which consists in introducing small doses of the antigen responsible for the development of the disease in a particular patient [5,7,8,14,18,20]. In this case, the sensitivity of the body to this antigen decreases. The history of the use of ASIT spans more than 100 years, and during this time a very large evidence base has been accumulated for the use of this method in clinical practice [3,13,15,17,19]. The use of ASIT leads to a reduction in symptoms, a reduction in the need for treatment, and in addition, it has a long-term clinical effect by preventing the development of allergy and its symptoms. Treatment affects the main immunological mechanisms responsible for the development of clinical symptoms.

The purpose of the study was to study the course of allergic rhinitis in children and evaluate the effectiveness of the ASIT method.

Materials and styles. The study was conducted in the otorhinolaryngology department of Bukhara city polyclinics, and 79 children with allergic rhinitis were examined. The age of patients diagnosed with allergic rhinitis was from 3 to 16 years, and the average age was 8.1±0.31. Before coming to the clinic, all patients underwent a questionnaire aimed at identifying or confirming "allergic rhinitis". The questionnaire was developed and adapted by the international ARIA program. The questionnaire consists of 2 main questions and 10 sub-items. Small items have "yes" or "no" answers. The diagnosis was determined according to the ARIA International Classification.

During the investigation, all 39 subjects were diagnosed with intermittent AR (IAR) and 31 subjects with persistent AR (PAR). When all patients were asked for anamnesis information, it was found that they had not only AR clinical symptoms, but also BA clinical symptoms (asphyxia attacks, acute cough, wheezing).

The skin irritation method was tested on the patients under investigation, where the sensitivity of different groups of allergens was determined. The effectiveness of allergen-specific immunotherapy was evaluated according to a 4-point system:

"4 points" - a very good result (complete absence of symptoms after the course of treatment);

"3 points" - a good result (significant improvement of breathing through the nose, restoration of the function of smell, rhinorrhea and sneezing only in a large relationship with allergies);

"2 points" - a satisfactory result (the main symptoms are less noticeable compared to the level before treatment, the need for medical treatment is reduced);

"1 point" - unsatisfactory result (no treatment effect). The obtained data were processed using the SPSS statistical program. During the study, the occurrence rate of each feature in the study groups was compared.

In all investigations, the level of significance (R) achieved in statistical analysis was calculated, and the critical level of significance was taken as 0.05. Result and discussion According to the results of the 1st main question, answers to the following questions were received during the survey conducted with 79 patients.

39 patients (100%) had watery discharge from the nose, 18 children (17.8%) had a small amount of mucous discharge. Sneezing and runny nose were observed in all children during the examination (100%).

Difficulty in nasal breathing ranged from mild to no nasal breathing at all. Itching of the nose was confirmed by all patients, persistent itching was noted in 32 patients (28.5%), moderate itching was noted in 45 (40%) patients.

When answering question 2, all patients denied unilateral nasal symptoms, nasal congestion was observed without other symptoms, which confirms the presence of an allergic process. Thick discharge from nose to throat was observed in 16 (20.3%) patients, mucus-purulent discharge was observed in 7 (8.8%) patients, which indicates the presence of other ENT pathology.

In 45 (40%) patients, it occurs with repeated nosebleeds, watery rhinorrhea and forced nose blowing. In 70 (88.3%) patients, lack of smell was identified as an additional symptom of AR.

Thus, with the help of the questionnaire, allergic rhinitis was detected in all children, as well as the pathology of the ENT organs was observed, which required further detailed accurate diagnosis.

Next, we analyzed the age at which the first symptoms of AR were observed. The first symptoms of AR were noted at the age of 5.9 years. The mean age of AR referral and clinical diagnosis was 9.1 years. It should be noted that, on average, 3 years have passed from the onset of AR symptoms to diagnosis. By the non-parametric analysis method, 74 patients (95.5%) were diagnosed late, and 5 (4.5%) patients were referred on time. Thus, the above study confirmed the worldwide data on delayed referral to specialists.

The distribution of patients with AR according to severity showed the following: in patients with IAR, severe level was observed in 32.5% (13), moderate level (42.5% (17) and mild - 25% (10) cases).

A mild level of persistent AR was not observed, an average level was noted in 22 (43.6%) patients, and a severe level was noted in 17 (43.6%) patients. do not interpret correctly and consult a doctor only when the level of AR worsens.

Patients in Group 1 with intermittent AR had disease progression mostly from June to mid-July. In the group of pollen allergens, sensitivity to grasses was most often found in 40 (74.1%) patients.

From the group of pollen allergens, sensitivity to weeds was mainly observed in wormwood pollen - 35 (54.9%), sensitivity to tree dust - 7 (13%), poplar - 5 (11.1%) patients. Epidermal sensitivity was noted in 3 (7.5%) patients. Children in the examined group of patients were found to have no sensitivity to household products.

Group 2 patients with persistent AR showed increased sensitivity to pollen and household allergens. In 56 (96.6%) patients, skin sensitivity to weed allergy prevailed. In 49 (84.5%) patients, it was found that the sensitivity to grass and grain grass dust is exceptional.

Among pollen allergens, sensitivity to tree dust was the least in 6 (10.3%) patients. Skin sensitivity to household allergens was detected in almost half of the patients with PAR - 25 (43.1%). From the spectrum of aeroallergens, the following were detected: Dermatophagoideus farinae - 13 patients (22.4%), Dermatophagoideus pteronissinus - 16 patients (27.5%), library dust - 6 patients (10.4%). Epidermal allergens were also detected: dog hair - 3 (5.1%), cat hair - 8 (13.8%) and pillow feathers - 10 (17.2%) patients with constant contact with this allergy. In this study, patients underwent ASIT based on the data obtained after skin scarification analysis.

In 39 patients with IAR, 19 (47.5%) from group 1 and 20 (52.5%) from group 2 were performed.

After 1 course of treatment with subcutaneous immunotherapy, a good result was noted in 6 (31.6%) patients with IAR in 1 group and in 5 (23.8%) children with PAR in 2 groups, only during the disease season and contact with allergens AR symptoms the result was satisfactory in 10.5% cases due to the outbreak.

Subcutaneous ASIT significantly improved the efficacy of treatment in both groups of patients, taking into account the dose of allergens administered annually.

In all patients of group 1 with IAR, the results of treatment within 3 years after receiving ASIT were found to be positive (89.5%), but satisfactory in 10.5%, because the seasonality of the disease and contact with allergens led to exacerbation of AR symptoms. In 31.6% of cases, the treatment outcome of patients was good, which was explained by significant contact with allergens and cross-sensitization in the use of forced allergens, that is, observation of episodic recurrence of AR symptoms. In 57.9% of patients, after the end of the entire course of treatment, a very good result was achieved, in this category of patients, the use of mandatory allergens and significant contact with allergens did not show signs of AR. Positive results were observed after 3 years of treatment in 66.7% of children with PAR in group 2. Good and satisfactory results after treatment in this group of patients were 33.3% and 42.9%, respectively. After 3 courses of ASIT, the effectiveness of subcutaneous treatment in group 2 with PAR was statistically confirmed.

In order to evaluate the effectiveness of the received therapy, skin scarification tests were repeated in all groups after 1-2-3 years, taking into account the spectrum of sensitization, after ASIT by the subcutaneous method. After the course of treatment, a positive trend was observed in 18 (94.7%) children in group 1 of patients with IAR after 1-2-3 years, a strong direct correlation between the effectiveness of treatment and the results of skin scarification tests r = 0.512 with IAR 100% in group 1, which is statistically confirmed.

After the ASIT treatment received in the 2nd group of children with PAR, only after the 2nd and 3rd courses of treatment, positive dynamics were noted in 12 (57.1%) patients, which was confirmed by the results of the skin examination - it showed a direct and strong correlation. Sublingual ASIT was performed in 31 patients with AR. All patients were divided into two groups: 16 (51.6%) children with IAR in group 1, 15 (48.4%) patients with PAR in group 2, underwent 3 treatment courses, and at the end of each course, skin tests were performed to evaluate the effectiveness of ASIT . After ASIT sublingual treatment courses, a positive result was observed in 14 (87.5%) patients in group 1 with IAR and in 13 (86.6%) patients in group 2 with PAR.

Aggravation of seasonal AR symptoms was observed only in 4 (25%) children in group 1 with IAR and in 2 (13.3%) patients in group 2 with AR after 3 courses of sublingual ASIT.

Complete clinical remission of the disease was confirmed by positive dynamics after the 2nd and 3rd courses of ASIT in 100% of patients in the 1st group with IAR; a very strong relationship was found - r= 0.946, in group 2 patients with PAR, complete clinical remission of the disease was not detected, but a positive trend (partial clinical remission) was observed in 11 (73.3%) patients after ASIT.

In this group of patients, disease progression was observed, and patients may not have always followed a hypoallergenic regimen and diet during ASIT, meaning there is a possibility of cross-contact with allergens[13-15].

Conclusions 1. The questionnaire proposed by the ARIA program is recommended to be implemented at the primary care level. It is recommended to use the questionnaire method for pre-clinical diagnosis and diagnosis of ENT pathology in children suspected of AR, and at the same time to refer to specialists in time.

2. As a result of the investigation, it was confirmed that the information we received regarding the late referral of AR, its BA and hypodiagnosis correspond to the world information. In this regard, patients in our follow-up were diagnosed with moderate and severe AR. Taking into account the observation of the first symptoms of AR in patients at the age of 5-6 and its comorbidity with other allergic diseases, it is necessary to conduct a mandatory preventive examination by a pediatric allergist.

3. In the group with IAR, the frequency of sensitivity to allergens of cereal grass prevailed (60.0%), followed by patients with a tendency to weeds (72.5%), trees (17.5%), sensitivity to epidermal allergen was observed in rare cases (7, 5%). Among children with PAR, sensitivity to weeds (79.5%), grains (51.3%) prevails, and in 56.4% of cases to household allergens, to household allergens - 43.6%, to trees - 15.4% sensitivity was confirmed at

4. The effectiveness of ASIT in children of group 1 with IAR was more effective than in children of group 2 with PAR (66.7%) by the method of subcutaneous introduction of allergen (89.5%), positive dynamics were noted in cases and patients with PAR . At the end of the third course, a complete remission was not confirmed, a partially positive dynamic was observed, which required further continuation of the ASIT course.

5. The obtained information is of priority in the development of preventive measures aimed at preventing the development of AR and BA and leads to early detection of AR in children.

6. It has been confirmed that 3 courses of ASIT in a row in children with IAR and PAR lead to clear and stable effectiveness of the disease.

Literature

1. Асманов А.И. и др. Аллергический ринит у детей: от диагностики к терапии. Что нового? Вестник оториноларингологии. 2020;85(1):74-78.
2. Баранов А.А. и др. Аллергический ринит у детей: принципы своевременной диагностики иэффективной терапии. Краткий обзор клинических рекомендаций. Педиатрическая фармакология. 2017;14:4.
3. Белых Н. А. Аллергический ринит у детей: современные подходы к диагностике, лечениюи профилактике. Современная педиатрия. 2015;8:22-28.

4. Воронцова И. М., Коровкина Е. С. Стратегия и тактика аллергенспецифической иммунотерапии у полисенсибилизированных пациентов. Педиатрия. Журнал им. ГН Сперанского. 2016;95:6.
5. Гриценко Е. В. и др. Оценка эффективности применения асит-терапии у детей. ВестникЧелябинской областной клинической больницы. 2019;2:58-60.
6. Карпищенко С. А., Колесникова О. М. Современные аспекты лечения аллергического ринита. Consilium Medicum. 2019;21:3.
7. Курбачева О. М., Амантурлиева М. Е. Роль барьерной функции слизистых оболочек приаллергических заболеваниях и при сублингвальной аллерген-специфической иммунотерапии. Бюллетень сибирской медицины. 2017;16:2.
8. Надей Е. В. и др. Оценка результатов кожного тестирования с ингаляционными аллергенами у больных коморбидной аллергической бронхиальной астмой на фоне аллергенспецифической иммунотерапии. Медицинский вестник Северного Кавказа. 2019;14:2.
9. Омушева С.Э.Современная диагностика и лечение аллергического ринита у детей в Киргизской Республике. Бюллетень науки и практики. 2020;6:1.
10. Пономарева Ю. В. и др. Отдаленные эффекты аллерген-специфической иммунотерапииу детей с аллергическим ринитом и бронхиальной астмой. Российский вестник перинатологиии педиатрии. 2020;65:4.
11. Прохорова М. П. Эффективность сублингвальной аллергенспецифической иммунотерапии у детей с бронхиальной астмой. Здоровье ребенка. 2015;6(66).
12. Рахматуллина Н. М. и др. Современные методы аллерген-специфической иммунотерапиив лечении аллергического ринита. Казанский медицинский журнал. 2016;97:2.
13. 13. Свистушкин В. М. и др. Современные возможности патогенетической терапии больныхаллергическим ринитом. Медицинский совет. 2020:6.
14. Федоров А.С, Литвинова Л.С., Бут-Гусаим В.И., Литвиненко С.Н. Медицинская иммунология 2015;17(5):407-422.
15. 15. Хаитов Р.М., Ильина Н.И. Клинические рекомендации разработаны и рекомендованыРоссийской ассоциацией аллергологов и клинических иммунологов 2014:126 .
16. Царев С. В. Асит–решение в лечении аллергии. Медицинский совет. 2017;9:116-119.
17. Чусляева А. А. Современные подходы в профилактике и терапии аллергического ринитау детей. Практика педиатра. 2018;1:10-14.
18. Alvarez-Cuesta E., Bousquet J., Canonica G.W., Durham S.R., Malling H.J., Valovirta E. Standards for practical allergen-specific immunotherapy. Allergy, 2016, Vol. 61, Suppl. 82, pp. 1-20. Khalmatova B.T., Saidkhonova A.M., Mirrakhimova M.K. Alterations in Intestinal Micro Flora inChildren with Allergic Rhinitis. Annals of R.S.C.B. Vol. 25, Issue 1, 2021, Pages. 4385 – 4390
19. Zhang Y., Quan L., Du L. The 100 Top-cited Articles in Main Allergy Journals: A BibliometricAnalysis. Iranian Journal of Allergy, Asthma and Immunology. 2019. https:doi.org/10.18502/ijaai. v18i6.2182