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**ADMINISTERING A SPECIFIC IMMUNOTHERAPY FOR ALLERGENS  
USING THE "ANTI POLLIN" PRODUCT, A BLEND OF WEEDS AND  
GRASSES, FOR SEASONAL CASES OF ALLERGIC RHINITIS  
(HAY FEVER)**

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*Over the past 30 years, meteorologists have observed an increase in the average temperature of the planet by 1 degree. This has led to large-scale changes in the growth patterns of allergenic plants, their pollen production, and even the levels of allergenic pollen proteins.*

**Keywords:** *allergic rhinitis, Pollinosis, Antipollin, ASIT, Weeds, Meadow grasses, Trees.*

Over the past 30 years, according to meteorologists, the average temperature on the planet has increased by 1 degree. This, in turn, caused large-scale changes in the areoles of allergenic plants, their dusting activity and even the level of allergenic pollen proteins. [1, p. 3]. The increase in the number of allergic diseases in recent decades has become a global problem around the world, requiring the joining of efforts not only from health systems, but also politicians, ecologists and other specialists whose work is associated with the formation of the human environment. [3, 4, 6 c. 6, 11.14]. The processes of global warming, widespread climate change, changes in construction technologies and other factors contribute to the change in human living conditions. [2.11.6 s 8, 12.16]. The increase in CO<sub>2</sub> in the atmospheric air in recent decades has caused changes in the growth rate of plants with earlier flowering and the release of large amounts of pollen. Cyclones, which have become more frequent in recent years, facilitate the transfer of allergenic pollen over long distances, which predisposes to the appearance of clinical manifestations in persons with latentsensitization. A number of authors note an increase in the prevalence of allergic diseases (AD) of the respiratory tract, including pollen etiology. With this pathology, which is based on a chronic inflammatory process that develops mainly on the mucous membrane of the respiratory organs, the goal of therapeutic measures is to achieve a good level of control over the symptoms of the disease, reduce the risk

of subsequent exacerbations and prevent aggravation AD.

In our country, 2 methods of introducing allergens are most often used - subcutaneous (SCIT) and sublingual (SLIT). As shown in many studies, these methods have common mechanisms of action in relation to the switching of the Th-cell response and the induction of blocking antibodies of the IgG isotype. However, the effect of large doses of the allergen, which occurs in SLIT, on the oral mucosa, which has a common lymphatic drainage from the nasal mucosa and cervical lymph nodes, causes additional local mechanisms and thus resembles the natural processes of tolerance formation. By its mechanism of action, ASIT is the only method capable of modifying the natural course of the disease, and its use is a unique opportunity to prevent the emergence of new sensitization in a patient. ASIT most fully meets the principles of personalized medicine. [10,9,7 c 12,3.5]. This means that the patient receives only the therapy intended for him according to the spectrum of sensitization and after proving the causal role of a particular allergen. In this article, we present our own data on the analysis of the effectiveness of Antipollin treatment of patients with various forms of hay fever with sensitization to pollen from wormwood, quinoa, and ragweed.

**Purpose of the study:** to evaluate the effectiveness of one course of SLIT in patients with allergy to pollen of meadow and weed grasses.

**Materials and research methods.** The patients were examined at the Republican Scientific Specialized Allergological Center of the Republic of Uzbekistan. One course pack contains 9 blisters of 6 tablets, 54 tablets in total. The active substance of the preparation "ANTIPOLLIN" a mixture of weeds and meadow grasses is an allergen of plant pollen from 0.0001 PNU to 1000 PNU. Blister No. 1- 0.0001 PNU, blister No. 2- 0.001 PNU, blister No. 3- 0.01 PNU, blister No. 4-

0.1 PNU, blister No. 5-1 PNU, blister No. 6-10 PNU, blister No. 7- 100 PNU, blister No. 8- 1000 PNU, blister No. 9- 1000 PNU. The drug "ANTIPOLLIN" was prescribed no later than 2 - 2.5 months before the beginning of the flowering season of the "guilty" plant (weeds). The patients used the drug "ANTIPOLLIN" before meals, one tablet a day, sublingually (under the tongue) until completely absorbed, without drinking water.

In the presence of colds, taking pills is contraindicated, therefore, patients were allowed to continue ASIT only after complete recovery. Patients strictly adhered to a hypoallergenic diet during treatment with ANTIPOLLIN. The diet was prescribed

individually for each patient, depending on the course of the disease. During treatment, patients were also advised to limit contact with possible allergens. During the menstrual cycle, women were advised to take a short break. On the days of taking ANTIPOLLIN tablets, a mixture of weeds and meadow grasses is also not advisable to consume alcohol.

To assess the dynamics in the future, before the start of treatment, questionnaires were filled in, reflecting the quality of life, the number and severity of symptoms. The effectiveness of therapy was assessed in points, taking into account the severity of clinical manifestations before flowering and during pollination, the need to take symptomatic drugs.

**Research results.** 43 people received "ANTIPOLLIN" a mixture of weeds and meadow grasses, including 24 adults: 13 women aged 19-50 years and 11 men aged 20-55 years. And also 19 children from 7 to 18 years old: 13 boys and 6 girls. All patients had not previously received ASIT. A carefully collected anamnesis made it possible to exclude patients who had contraindications. In the blood of patients, specific IgE to pollen allergens, an increase in total IgE were detected, positive results were obtained during skin testing with pollen allergens. All patients at the start of treatment with "ANTIPOLLIN" were in remission for the underlying disease. Terms of treatment start: December - meadow grasses, from March - weeds. The course of treatment consisted of daily sublingual use of the tablets for 70 days. The so-called pre-season ASIT. Side effects in the form of itching of the oropharynx, moderate nasal congestion was observed in 17-12% of patients and only when taking the first 2-3 blisters. Symptoms were mild and resolved on their own, therefore drug withdrawal was not required in any case.

An excellent result was considered the absence of all manifestations of the disease; good - the clinical manifestations of the disease are insignificant, do not affect the quality of life and can be completely stopped by taking a minimum amount of symptomatic drugs; satisfactory - the manifestations of the disease have become less frequent and less pronounced, but at the same time the quality of life is reduced, in order to achieve partial remission, it is required to take symptomatic drugs; unsatisfactory - no clinical improvement.

The results of the study noted that in the subsequent ASIT season of exacerbation, clinical symptoms were noted by 72.4% of patients - after sIASIT. In patients with hay fever after a course of ASIT, a follow-up was found to decrease the frequency and severity of nasal symptoms to 66.7%, conjunctival - to 33.3% and 30%, in

patients with hay fever it was accompanied by a significant decrease in both indicators of eosinophils in the peripheral blood.

After the ASIT course, a decrease in the degree of sensitization to weed allergens was noted in 55.0% of individuals, absence - in 40.0%, a "new" episode of sensitization - in 5.0% of individuals, the persisting degree of sensitization was not observed in 1 patient. 65.0% of patients had one or another sensitization to meadow fescue. The persisting degree of sensitization was noted in 27.8% - after sIASIT, a decrease in the degree of sensitization was noted in 55.6%; lack of sensitization to this allergen -16.7%.

76.7% of patients had one or another sensitization to wormwood. The persisting degree of sensitization was noted in 4.2% - after sIASIT; a decrease in the degree of sensitization was noted in 39.1%; lack of sensitization to this allergen - in 34.8%,

54.2% of patients had some type of sensitization to swan. The persisting degree of sensitization was noted in 16.7%; a decrease in the degree of sensitization was noted in 16.7; lack of sensitization to this allergen - 58.3%. After the first course of treatment, a decrease in the level of general and specific Ig E was noted in 88% of patients.

**Conclusion.** Based on the results reviewed by us, it can be concluded that ASIT with the use of the drug "ANTIPOLLIN" a mixture of weeds and meadow grasses allows to achieve a high clinical and immunological effect, since it affects almost all significant links in the pathogenesis of an allergic reaction, and serves as the basis for use in general practice treatment of pollinosis.

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