



## NASAL AND THROAT DISEASES IN CHILDREN, THEIR PREVALENCE, PREVENTION AND THE IMPORTANCE OF FAMILY REHABILITATION

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### ABSTRACT

*This article discusses nasal and throat diseases in children, their prevalence, prevention and the importance of family rehabilitation during the disease process. It considers early detection and accurate diagnosis of the disease, along with children's adherence to hygiene rules as the main criteria. Children with ENT diseases are more likely to develop other diseases, including viral and allergic diseases, respiratory failure, changes in visual function, emotional lability, and rheumatological diseases. Taking this into account, the article provides information on the analysis of the correct care and treatment of the nasal cavity and nasopharynx from the initial stages of various inflammatory processes.*

The health of children largely depends on the socio-hygienic conditions and lifestyle, the state of the environment and the health of family members. Of the total number of visits to an otolaryngologist by children, up to half are due to pathology of the pharynx and nasopharynx, about 25% are diseases of the paranasal sinuses, and the remaining 30-33% are diseases of the middle ear. Currently, pediatric nasal and throat pathology ranks fifth in the morbidity structure, and hearing loss and deaf-muteness are a serious social problem. Complications that arise after insufficiently treated nasal and throat diseases lead to severe chronic pathology and loss of ability to work in adulthood in the future, which is also an important social problem. E.P. Karpova (2012); notes that morbidity rates play a large role in assessing the quality of health of the child population, and the statistical data are alarming: the overall morbidity of children is growing, while the share of respiratory diseases in its structure is increasing, they occupy leading positions.

The prevalence of diseases of the nose and paranasal sinuses in children reaches 28-30%. Almost every child over the age of 1.5 years suffers from one or another acute disease of the nasal and throat organs at least once a year; of the 30-40 million cases of acute respiratory viral infections registered annually, about 70% occur in childhood. Chronic diseases of the pharynx in children occur in 54% of cases, diseases of the nose and paranasal sinuses - 16%,

and ear diseases - about 28%. A pressing medical and social problem is the optimization of treatment methods for lymphadenotonsillar pathology (adenoiditis, granular pharyngitis, chronic tonsillitis), which is observed in 60-70% of children. Complications of chronic tonsillitis, such as endo- and myocarditis, polyarthritis, glomerulo- and pyelonephritis, pose a great danger to the child's life and the likelihood of his disability in the future. The most common diseases of the lymphadenoid pharyngeal ring in preschool and primary school children are hypertrophy and inflammation of the adenoid vegetations, which causes headaches, attention disorders, nocturia, high blood pressure, and neurological disorders. Thus, health authorities should consider timely sanitation of nasal and throat organs in children as the most important quality indicator in the system of maternal and child health, since failure to carry out these measures leads to chronicity of the child's diseases and serious health problems in the future.

Treatment of children with nasal and throat diseases should be timely and comprehensive, i.e. carried out by several specialists of different profiles (pediatrician, otolaryngologist, allergist-immunologist, neurologist, rheumatologist, physiotherapist) to avoid complications. Medical and pedagogical workers of preschool institutions are recommended to conduct breathing exercises and hardening of children of different ages and promote this method among parents. A promising organizational form of observation and health improvement of children at risk for nasal and throat pathology attending preschool institutions is a health-improving nursery-kindergarten operating under an innovative program for the development of organized preschoolers. The introduction of a set of medical and social measures to strengthen the health of risk contingents, as an integral part of this program, allows to reduce childhood morbidity by an average of 32.3% depending on the age of the children.

The child's home environment plays an important role in the development of frequent upper respiratory tract and ear diseases: close contact with relatives, kisses from sick parents, shared dishes and towels, shared toys with sick brothers and sisters - all this contributes to infection and further illness of small patients. Inadequate exercise, failure to follow a daily routine, late waking, the presence of a large amount of computer equipment in the room, the noise of a working TV or loud music, crowding of family members in a small living space, smoking relatives and drinking alcoholic beverages - all this contributes to the child's fatigue, weakening of his nervous and immune systems and, as a result, frequent illnesses. Sometimes parents get animals at home for educational purposes, not taking into account that this contributes to the occurrence of allergic diseases and helminthic invasions in children if hygiene skills are not observed.

Medical statistics claim that the incidence of helminthic invasions (helminthiasis) is very high. Among children attending preschool and school children's institutions, the infection rate is close to 80%. Experts are sure that most of the population (even those who observe hygiene rules) has worms. A large number of helminthic invasions at an early stage of formation occur in a latent form, and not every doctor can make a correct diagnosis in time. At the same time, no organ or tissue of a person is insured against the possibility of invasion by one or another type of worms. Parasites can live in the human body for years, even decades, adapting to the most unfavorable conditions, and not manifest themselves in any way. They become active when the carrier's immunity decreases. Allergists claim that more than half of all allergic reactions are the result of existing or previously experienced helminthiasis. Parasites negatively affect the body's defenses, and this leads to a decrease in immunity, which in turn leads to an increase in the frequency of acute respiratory and infectious diseases, prolongation and complication of their course. Special tests are needed to diagnose helminthiasis. Children are usually prescribed stool tests for helminth eggs and scrapings for enterobiasis. The results may be inaccurate. To detect eggs, it is necessary to catch the moment when the parasites multiply. To do this, it is necessary to take a three-time test with an interval of several days. Concomitant examinations can also confirm helminthiasis - a test

for dysbacteriosis (suppression of normal *E. coli*) and general (low hemoglobin, increased eosinophils and ESR).

It is advisable to donate blood to determine immunoglobulins to the main types of helminths. If in adults this disease usually proceeds asymptotically, then in a child the disease most often manifests itself as an allergy. The presence of foci of chronic infection in relatives also contributes to the weakening of the protective mechanisms of the child in contact with them. Such diseases can be: chronic sinusitis, tonsillitis, bronchitis, sluggish infections and a number of others. Clinical example: We observed a child S. 8 months old, who moved with his parents from N-sk. For 3 months, he suffered from recurrent tubootitis: hearing was reduced, the child slept restlessly, pulled at the auricles, did not latch on well when feeding, often cried and was irritable. Periodically, the parents contacted the pediatrician about inflammatory diseases and a runny nose that developed in the child, the child was treated several times by an otolaryngologist with a diagnosis of acute right-sided otitis. Despite 3 courses of active full-fledged treatment (antibacterial and hyposensitizing therapy, sanitation of the nose and nasopharynx, instillation of drops into the ear - otipax, furacilin alcohol, etc., physiotherapy), complete recovery did not occur: the eardrum on the right remained cloudy pink, edematous, the light cone was absent, there were no perforations of the eardrum and discharge from the ear canal. Runny nose with greenish thick mucus periodically resumed. The child's mother was examined, she is healthy, continues to breastfeed her son and follows all the recommendations of the pediatrician and otolaryngologist.

During the follow-up visit, the doctor noticed that the child's father was very tender towards him, played with him and often kissed him on the face, cheeks and eyes. When the child subsequently fell ill with acute tonsillopharyngitis, it was suggested to examine his father, although he had no health complaints. After the examination, the diagnosis was: Exacerbation of chronic tonsillitis. Hypertrophy of the palatine tonsils of the III degree. Treatment was prescribed for the child and his father. But, despite this, the child continued to be ill for another six months, until the purulent focus of the father's palatine tonsils was sanitized (a bilateral tonsillectomy was performed under general anesthesia). And only after that was it possible to cure the child and restore his hearing. Now S. is 3 years old, he is practically healthy.

Proper balanced nutrition and routine are of great importance for immunity. If a child spends little time outdoors, inhales tobacco smoke from smoking parents, leads a sedentary lifestyle - all this can lead to a weakening of the immune defense.

A weakening of the protective barrier can be affected by long-term and, sometimes, unreasonable use of certain medications, in particular, antibiotics and other chemotherapy drugs. If a child is often ill, it is necessary to begin preventive general health measures: walks in the fresh air for at least 2 hours (dressing the child according to the weather, not wrapping up excessively) adequate physical activity, it is necessary to review and balance the diet, treat foci of chronic infection.

A frequently ill child requires examination and consultation with a doctor to select medications in order to speed up recovery, reduce the risk of complications, and activate the body's defenses. For this purpose, enzymes are used - the basis of life, regulators of all biochemical processes in the body. It is with the help of enzymes that it is possible to renew aged cells, convert nutrients into energy, and neutralize foreign substances and microorganisms. The method of systemic enzyme therapy is based on the use of combinations of highly active enzymes that can strengthen the immune system, reduce inflammation, and improve microcirculation. One of the drugs of systemic enzyme therapy is the drug Wobenzym. This combination of enzymes of plant and animal origin defines a new approach to the problem of complex treatment of frequently ill children.

In fact, one drug implements its action in 5 therapeutic areas: optimizes the course of the inflammatory process, accelerating recovery, activates the body's defenses in the fight against

viruses and microbes, improves microcirculation and tissue oxygen supply, increases the concentration of antibiotics in the inflammation site, reduces the side effects of antibiotics, intestinal dysbacteriosis. Recommended for the treatment of frequently and long-term ill children Immunorix is a multi-directional immunomodulator, the only systemic immunomodulator for the treatment of respiratory infections recommended by WHO. The high proportion of acute diseases of the ear, throat and nose in frequently ill children is due to their age characteristics - the maximum number of acute cases occurs in preschool age - from 1 year to 4 years, then this level decreases. The maximum number of chronic diseases of the nasal and throat organs (by appeal) occurs at the age of 5-6 years. The maximum prevalence of chronic tonsillitis, both according to examination data and appeals, is noted in children aged 10-14 years. Chronic otitis media, diseases of the nose and paranasal sinuses, and larynx diseases are equally common in girls and boys. The ratio of acute and chronic diseases in the prevalence of ear, nose and throat diseases is 10:1.

The results of the study showed that certain diseases are characteristic of a certain age. According to our data, the frequency of combined pathology increases with the age of children, and at the age of 14, it exceeds the level of children under 1 year by 1.8 times. The influence of climatic and geographical factors on the prevalence of individual groups of nasal and throat diseases has been established. Thus, the study revealed that in settlements located in the southern regions of the country, the prevalence of inflammatory diseases of the middle ear is significantly lower than in research bases located in geographic zones with sharp fluctuations in climatic conditions. A decrease in the incidence rate was noted during the first three years of a child's attendance at children's educational institutions.

In the structure of morbidity in the studied groups of children after entering school, the leading reasons for seeking help are respiratory diseases (60.4% and 73.9%). Analysis of the structure of morbidity of children who moved to middle and senior grades of school showed that the leading conditions were respiratory diseases (65.5% and 79.9%). It is advisable to improve the health of children with a high risk of developing the main types of chronic pathology of the nasal and throat organs all year round. A survey of mothers showed that there are many risk factors for nasal and throat diseases in the conditions and lifestyle of families with children. Among them: an unfavorable living environment associated with overcrowding of family members, smoking parents, air pollution, noted by respondents in 45-50% of cases; insufficient sanitary literacy and low medical activity - 32-57% of respondents, the spread of smoking among mothers - in 19-34% of cases; alcohol consumption by mothers (2-8% of respondents). Thus, it becomes clear that the child's rehabilitation should be family-based, since the presence of harmful factors in the child's home environment, where he spends a lot of time with his family members, can have both a negative and positive effect on his health, depending on the health of his relatives and the presence (or absence) of bad habits. Health authorities should consider timely sanitation of nasal and throat organs in children as the most important quality indicator in the system of maternal and child health, since failure to carry out these measures leads to the chronicity of the child's diseases.

Treatment of children with nasal and throat diseases should be timely and comprehensive, i.e. carried out by several specialists of different profiles (including an otolaryngologist, pediatrician, allergist-immunologist, physiotherapist, etc.) in order to avoid subsequent complications. Medical and pedagogical workers of preschool institutions are recommended to conduct physical education classes and hardening of children of different ages and promote this method among parents.

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