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EFFICIENCY OF CONSERVATIVE THERAPY IN CHILDREN WITH CHRONIC ADENOIDITIS COMBINED WITH ALLERGIC RHINITIS

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Abstract

Chronic inflammatory diseases of the Pirogov-Waldeyer lymphoid pharyngeal ring - chronic tonsillitis and chronic adenoiditis - are one of the most important problems not only in pediatric otolaryngology, but also in pediatrics in general. They are the most common diseases in the structure of chronic diseases of the nasopharynx in childhood. Hypertrophy of the pharyngeal tonsil, which maintains chronic rhinitis and impedes nasal breathing, contributes to a decrease in the child's resistance to external stimuli, which leads to the development of many chronic diseases: sinusitis, tonsillitis, otitis, lesions of the bronchopulmonary system, cardiovascular pathology, etc. Chronic foci of inflammation in the nasopharynx change the immunobiological reactivity of the child's body and cause the development of secondary immunopathological conditions and immune deficiency. Children have certain characteristics of chronic diseases of the lymphoid pharyngeal ring. They are rarely recognized in the first 2-3 years of life, when they are most often manifested by hypertrophy of the tonsils (in most cases, this is hypertrophic tonsillitis and adenoiditis). However, doctors' attention is focused on such manifestations of these diseases as susceptibility to frequent respiratory viral infections (children who often get sick) or breathing disorders (sleep apnea, nasal breathing disorders). Chronic inflammatory diseases of the lymphoid pharyngeal ring are detected in 47% of frequently ill children, which is twice as frequent as their frequency in children in the general population. It is a known fact that chronic diseases of the nasal cavity, paranasal sinuses and nasopharynx are often combined with each other. The course of chronic adenoiditis is usually accompanied by chronic rhinitis, in particular, allergic rhinitis. Allergic inflammation of the pharyngeal tonsil and its subsequent hyperplasia significantly worsen nasal obstruction. In allergic rhinitis, the pharyngeal tonsil becomes a "shock organ" where inhaled agents (respiratory allergens) are retained. The prevalence of hyperplasia of adenoid vegetations in allergic rhinitis in children exceeds that in the general population by 2-3 times. During an allergological examination of children with a high degree of hyperplasia of the pharyngeal tonsil, a positive reaction to non-infectious allergens is recorded in more than 70% of cases, and during a morphological and immunohistochemical study of the lymphadenoid tissue of the nasopharynx, characteristic signs of their allergic inflammation - allergic adenoiditis - are revealed.

INTRODUCTION

The Purpose of the Study:

To conduct a comprehensive comparative analysis of the effectiveness of various methods of long-term conservative therapy for chronic adenoiditis with concomitant allergic rhinitis in children.

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Research Objectives:

To study the characteristics of the course of chronic adenoiditis against the background of allergic rhinitis in children. To determine the state of local protective factors, microbiocenosis of the mucous membrane of the upper respiratory tract, indicators of nasal passage patency in children with chronic adenoiditis against the background of allergic rhinitis. To analyze the effectiveness of antileukotriene therapy (montelukast) as monotherapy and in combination with a topical steroid (mometasone furoate) for chronic adenoiditis against the background of allergic rhinitis in children. To compare the outcomes of surgical and conservative treatment of children with chronic adenoiditis against the background of allergic rhinitis, by the frequency of relapses of adenoid vegetations and other parameters.

Allergic diseases are a pressing issue in practical healthcare and have attracted increasing attention from physicians of various specialties in recent decades. According to WHO, allergic diseases are the third most common in the world, as almost 40% of the population of highly developed countries have signs of atopy. Scientific forecasts indicate a further increase in the number of allergic diseases, which is especially noticeable in childhood. At the same time, the most common pathology of the lymph nodes in childhood are diseases of the lymphoid ring of the pharynx, their hypertrophy and inflammatory diseases. According to world statistics, by the age of 14, 10-15% of children have various signs of allergy, and 30-40% of patients with allergic rhinitis are diagnosed with adenoid vegetations.

The question of the significance of adenoid vegetations in the pathogenesis of allergy has not been resolved to date. The combination and interaction of allergic rhinitis, adenoiditis and bronchial asthma is the most important problem of modern allergology and otolaryngology. The relationship between these diseases requires serious study, in particular the question of the effect of adenotomy on the further course of allergic rhinitis. There is no answer yet to the question of whether removal of the pharyngeal tonsil increases the risk of bronchial asthma. The pharyngeal tonsil is localized in a critical zone: at the intersection of the respiratory and digestive tracts, where the most intense antigenic impact is recorded, both infectious and non-infectious.

With a significant increase in the pharyngeal tonsil, normal nasal breathing is disrupted, as a result of which mucociliary transport is disrupted and mucus stagnation occurs in the nasal cavity. Foreign particles, allergens, viruses, bacteria, chemicals that penetrate the nasal cavity with the flow of inhaled air stick to the mucus. Allergens fixed in the nasal cavity and nasopharynx become triggers for allergic inflammation, the proliferation of viruses; the growth of bacterial colonies leads to the occurrence of infectious inflammation; as a result, the clinical differences between these two forms of pathology can be erased.

It is important for an otolaryngologist to promptly recognize the essence of the pathological process in the upper respiratory tract, since the appointment of etiologically and pathogenetically substantiated treatment depends on a timely and correctly established diagnosis.

The relevance of the issue is also due to the fact that, despite the large number of drugs used to treat allergic rhinitis and adenoiditis, the problem of treating this disease in children is far from being completely resolved. A modern comprehensive approach to therapeutic measures does not always lead to the desired result. New problems arise related to the duration of use of intranasal

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agents and new generation antihistamines, individual sensitivity of the body to allergens and pharmacological drugs in children.

The problem of allergic adenoiditis in children has become especially relevant in recent years. This is due to the fact that children with allergic rhinitis are often observed with a diagnosis; adenoid vegetations and undergo surgery. Some believe that surgery leads not only to a relapse of the disease, but also to a significant worsening of allergic rhinitis, while others believe that without surgical correction one cannot count on the success of restoring nasal breathing. Doctors have questions: should such children be operated on? How and when? Therefore, adenotomy in a child with allergies should have carefully verified indications in order to avoid aggravation of the clinical manifestations of allergosis.

All of the above explains the interest of clinicians in finding new methods of treating adenoiditis in children suffering from allergies, which can increase the effectiveness of the therapy, reduce the frequency of relapses and complications. These reasons were the motivation for studying the characteristics of the course and treatment of chronic adenoiditis in children with allergies. The above arguments suggest that the topic of this study is relevant and corresponds to the priority preventive direction of children's health care.

Conclusions:

Children with chronic adenoiditis combined with allergic rhinitis are characterized by severe nasal obstruction, suppression of local immunity with persistence of (3-hemolytic streptococcus in the nasopharynx in 37% of patients. Against the background of the use of montelukast for 1 month in children with chronic adenoiditis combined with allergic rhinitis, the number of complaints significantly decreased, hypertrophy of the pharyngeal tonsil decreased, and nasal peak flowmetry data improved. The combination of montelukast and mometasone furoate therapy, used for a month, had a more significant and long-lasting clinical and functional effect in children with chronic adenoiditis. Adenotomy for adenoids of grades I and II in children with atopy is ineffective in half of the cases (48.8%) (adenoid growths recur) and contributes to the increase in the frequency of obstructive bonchitis (53.8% of children) and the development of bronchial asthma (17.3% of children). In children without atopy, adenotomy led to a decrease in the frequency of exacerbations of chronic sinusitis to 8.2% (in the group without adenotomy, their frequency was 28%).

Practical Recommendations

When conducting routine medical examinations of children in preschool and school institutions and detecting signs of atopy (allergic rhinitis, atopic dermatitis), a consultation with an otolaryngologist is mandatory to identify chronic adenoiditis. The algorithm of clinical, instrumental and laboratory examination of children with chronic adenoiditis and concomitant allergic rhinitis is as follows: examination of the cellular composition of nasal secretion, examination of the microbial landscape of the nasopharynx and local protective factors, endoscopic examination of the nasal cavity and nasopharynx, audiological examination. For conservative treatment of children with chronic adenoiditis with adenoids of grades I and II and concomitant allergic rhinitis, the antileukotriene drug montelukast can be recommended for use -

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chewable tablets 5 mg at night for 30 days, both isolated and in combination with a topical steroid - mometasone furoate - 50 mcg intranasally in each nasal passage once a day for 30 days. The question of performing adenotomy in children with chronic adenoiditis and concomitant allergic rhinitis should be decided collectively (pediatrician, otolaryngologist, surgeon); the presence of atopy in a child can be considered as a possible contraindication to surgical treatment.

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