

CLINICAL AND MORPHOLOGICAL COURSE OF ADENOIDS IN CHILDREN WITH ALLERGIC DISEASES OF THE NASAL CAVITY AND NASOPHARYNX

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Abstract

The high prevalence of respiratory diseases in childhood is largely due to diseases of the lymphadenoid ring of the pharynx. In children of preschool and primary school age, the most common pathology is the pharyngeal tonsil, which accounts for about 50% of the structure of diseases of the ear, nose and throat. Adenoid growths cause a variety of local disorders; and of a general nature. In the structure of the pathology of the pharyngeal tonsil, the most common are its hypertrophy and chronic adenoiditis, which are based on different pathogenetic mechanisms, which requires a differential approach to the treatment of children with these diseases.

The tonsils of the lymphadenoid pharyngeal ring are secondary, peripheral organs of the immune system with a unique structural organization and are currently considered as regional centers with immunoregulatory functions in relation to the controlled mucous membranes. Even in a state of hypertrophy or chronic inflammation, the pharyngeal tonsil retains its functional immune activity. In this regard, complete removal of the adenoids, which is a traditional method of treating hypertrophy of the pharyngeal tonsil, and in some cases chronic adenoiditis, can be regarded as a powerful immunosuppressive effect on the child's body. The negative consequences of adenotomy include the development of chronic tonsillitis, chronic hypertrophic pharyngitis, and in some cases relapse of adenoids. You should approach adenotomy with caution in case of respiratory allergies, since surgical trauma can be a nonspecific trigger for the manifestation of bronchitis. In addition, surgery, usually performed without anesthesia, can have a negative impact on the psycho-emotional status of the child. All this dictates the need to search for new gentle methods of treating the pathology of the pharyngeal tonsil.

Keywords: lymphadenoid ring, adenoid growths, hypertrophy, pathogenetic mechanisms, immuno-regulatory function, respiratory allergies, anesthesia, organ-sparing treatment methods, allergy anamnesis, clinical and functional research, otoscopy, rhinoscopy, pharyngoscopy, laryngoscopy, laboratory research, cytological examination, microbiological (bacteriological) research.



Introduction

Purpose of the study

Increasing the diagnosis and effectiveness of treatment of stage II adenoids and chronic adenoiditis in children.

Research objectives

1. To clarify the clinical characteristics and anamnestic risk factors for hypertrophy of the pharyngeal tonsil and chronic adenoiditis.
2. To substantiate and test organ-sparing methods of treating hypertrophy of the pharyngeal tonsil and chronic adenoiditis.
3. Assess the effectiveness of the proposed treatment methods based on clinical and functional research data.

Materials and methods of research

25 children aged 2 to 7 years with pathology of the pharyngeal tonsil were examined. The examination and surgical treatment of children was carried out at the ENT department of the Andijan Regional Children's Clinical Hospital.

Collecting anamnesis and documenting complaints.

In all cases, the examination of the child was preceded by a conversation with the parents or official guardians of the child. The complaints and the duration of their presence were clarified, as well as what treatment had already been carried out and with what effect. To more accurately formulate and document complaints, all parents were asked to fill out a specially designed questionnaire. The survey questions were formulated in a form that could be understood by a person without medical education. The first 8 questions concerned complaints caused by pathology of the pharyngeal tonsil, the remaining questions were aimed at studying the allergy history.

1. Difficulty in nasal breathing - the child often or constantly keeps his mouth slightly open.
2. Frequent (more than 3-4 times a year) or prolonged (more than 2-3 weeks) purulent runny nose (yellow or green nasal discharge).
3. Nasality (the child speaks "in his nose" even when there is no has a cold).
4. Night snoring, snoring.
5. Holding your breath during sleep (during sleep, snoring causes periods of several seconds when the child stops breathing).
6. Hearing loss (the child often asks questions, listens loudly music and TV).
7. Frequent otitis (the child's ears often hurt; please indicate how often or how many times such conditions occurred).
8. Frequent colds (please indicate how many times a year on average).
9. Runny nose in the form of clear mucous discharge ("water" from the nose).
10. Itching in the nose, sneezing attacks.
11. Itching in the eyes, watery eyes.
12. Attacks of coughing or wheezing when exhaling.
13. Do you observe seasonality of complaints?
14. For children with bronchial asthma, please indicate the frequency of use of antispasmodics.
15. Have any of your parents or relatives observed relatives of the child have allergic diseases.





16. How long was the child breastfed?

Otorhinolaryngological examination of the child.

Before the start of the endoscopic examination, attention was paid to the child's appearance and constitution, the presence of wheezing during inhalation and exhalation, a slightly open mouth, and smoothness of the nasolabial fold. To enter into a trusting relationship with the child, a short conversation was held, a few simple questions were asked, and attention was paid to the presence of rhinorrhea in the subject. Then the lymph nodes in the submandibular region and neck were palpated. Next, an endoscopic examination of the ENT organs was performed.

Otoscopy. Attention was paid to the presence of signs of tubo-otitis (retraction of the tympanic membrane, shortening of the light reflex) and secretory otitis (dim tympanic membrane, smoothness of identification points, shortening of the light reflex or its absence, the presence of a fluid level visible through the eardrum). This pathology often accompanies hypertrophy of the pharyngeal tonsil and chronic adenoiditis; when it was detected, children were additionally sent for an audiometric study (up to 5-6 years in a playful way), impedance measurement, and consultation with an audiologist.

Rhinoscopy. Usually, swollen, sometimes bluish, anterior ends of the inferior nasal conchae were detected. The presence of mucopurulent discharge in the lower and common nasal passages from the nasopharynx indicated an exacerbation of chronic inflammation of the pharyngeal tonsil. If necessary, anemization of the mucous membrane of the nasal turbinates was carried out using lubrication or application of vasoconstrictor drugs (adrenaline solution 0.01%, naphthyzine solution 0.05%, etc.). In some cases, this made it possible to visualize a hypertrophied pharyngeal tonsil. Also, anterior rhinoscopy made it possible to identify clinical signs of concomitant ENT diseases: sinusitis, deviated nasal septum, allergic rhinitis and others. If necessary, an X-ray examination of the paranasal sinuses was performed in a direct projection.

If there were difficulties in identifying adenoids using anterior rhinoscopy, posterior rhinoscopy was performed in older children. In some cases, the adenoids could be seen through the mouth by slightly lifting the soft palate with the edge of a spatula. In case of an increased gag reflex or extreme negativism of the child to examination, as well as in other doubtful cases, an X-ray examination of the nasopharynx in a lateral projection was prescribed. In young children, in doubtful cases, a digital examination of the nasopharynx was sometimes performed.

Pharyngoscopy was preceded by examination of the oral mucosa, tongue, teeth, gums and hard palate. At the same time, possible inflammatory diseases of the oral cavity, the presence of caries in the teeth, and loose milk teeth were identified, which is especially important if the child is preparing for adenotomy. Then the soft palate, palatine arches, palatine tonsils, and the posterior wall of the pharynx were examined. Signs of chronic tonsillitis and hypertrophy of the palatine tonsils, diseases often accompanying the pathology of the pharyngeal tonsil, were revealed. When examining the back wall of the pharynx, attention was paid to its color, moisture, granularity, and the presence of secretions descending from the nasopharynx.

Laryngoscopy was performed only if children had complaints of hoarseness, discomfort in the larynx, etc.

Laboratory research. Cytological examination of nasal discharge. Microbiological (bacteriological) study of mucus from the nasopharynx.

Conclusions

1. Based on the developed method of comprehensive examination, concomitant allergic diseases were identified in children with pathology of the pharyngeal tonsil in 58% of cases, and a burdened allergic anamnesis was found in 22% of cases, which confirms the cause-and-effect relationship between childhood allergopathology and diseases of the lymphoepithelial pharyngeal ring.
2. The developed method for comprehensive assessment of the effectiveness of adenotomy showed a positive result of surgical treatment of children with pathology of the pharyngeal tonsil against the background of concomitant allergic diseases.
3. The method for predicting the effectiveness of adenotomy can be considered an additional objective criterion when deciding on the surgical treatment of children with pathology of the pharyngeal tonsil due to allergic diseases.
4. Adenotomy surgery in children with concomitant allergic diseases with adequate surgical technique and special preoperative preparation and postoperative management does not lead to an exacerbation of allergic pathology.

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