

Complex Therapy of Adenoiditis in Children and Adolescents

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ABSTRACT

Upper respiratory tract infections occupy a leading place in the structure of morbidity of the child population. In recent years, there has been a tendency to increase the incidence of adenoiditis in children. This article describes in detail the features of the etiology, clinical picture, differential diagnosis and treatment of this disease. The role of lymphoid formations in the formation of local immunity of the upper respiratory tract is presented. The authors emphasize the need to expand indications for conservative methods of treatment and they warn against carrying out unreasonable surgical interventions. Conservative treatment of adenoiditis should be comprehensive, including irrigation therapy with isotonic solutions of the nasal cavity and nasopharynx, local and systemic antibacterial therapy. Particular attention is paid to the use of mucolytic drugs. The effectiveness of an expectorant phytopreparation with anti-inflammatory, antimicrobial action, which helps to reduce the viscosity of sputum and its better discharge, is shown.

Objective: Complex therapy of adenoiditis in children and adolescents.

Materials and methods.

Infections of the upper respiratory tract occupy a leading place in the structure of the morbidity of the child population. There is a persistent tendency to increase the incidence of adenoiditis in children. Adenoiditis is an inflammation of the pharyngeal tonsil of the Pirogov—Waldeyer lymphopharyngeal ring. There are acute and chronic adenoiditis. Acute adenoiditis is an acute inflammation of the pharyngeal tonsil of mainly infectious etiology associated with acute inflammation of the oropharynx or nasal mucosa. In most cases, acute adenoiditis is a physiological reaction of the immune system tissues of the pharyngeal tonsil on the infectious process in the upper respiratory tract. Chronic adenoiditis is a polyetiological disease, which is based on a violation of the physiological immune processes of the pharyngeal tonsil [1]. The frequency of chronic adenoiditis in children under the age of 14 reaches 50%. According to ICD-X, acute chronic adenoiditis is not isolated into a separate nosological form. Acute adenoiditis usually passes by the code of acute nasopharyngitis (J02), chronic adenoiditis — by the code of other chronic diseases of the tonsils and adenoids.

Results and discussion.

With chronic adenoiditis, breathing through the nose is disrupted; mouth breathing leads to insufficient humidification, warming and cleansing of the air, and in the future — to the development of bronchitis and other inflammatory diseases of the lower respiratory tract.

Forced breathing through the mouth helps to reduce the tone of the pharyngeal muscles, adenoid vegetations make the movement of the air jet turbulent, which leads to vibration of the soft palate, respectively, to the occurrence of snoring and even obstructive apnea syndrome. Nasopharyngeal obstruction leads to a violation of the function of external respiration, there is a

decrease in gas exchange, a decrease in the partial pressure of oxygen in the blood and an increase in the concentration of carbon dioxide in the arterial capillaries. The constantly open mouth and the associated tension of the facial muscles can cause a change in the configuration of the growing skull of the child: the skeleton of the head is lengthened, the upper jaw protrudes forward, and the lower jaw droops, the head is stretched up and forward. The turgor of the facial muscles weakens, smoothed out nasolabial folds, and live facial expressions are lost. These features create a typical expression of the "adenoid type" of the face (*habitus adenoideus*).

When examining the oral cavity, multiple caries, pathological pigmentation, and improper development of teeth are often found. The main complaints of parents of children with chronic adenoiditis: cough, especially in the morning or after sleep due to mucus flowing down the back wall of the pharynx; poor sleep, difficulty in nasal breathing, frequent episodes of colds, nasal twang. During palpation, enlarged painless submandibular and cervical lymph nodes are determined; during pharyngoscopy, the mucous discharge flows down the back wall of the pharynx from under the soft palate. As a result, secondary granulose pharyngitis often develops. Rhinoscopy may detect symptoms of vasomotor rhinitis with signs of allergy (edematous, congestive or pale nasal mucosa with mucous or purulent discharge in the back of the nose). After anemization of the mucous membrane, "mobile" adenoid vegetations can be seen through the lumen of the hoan.

Adenoids disrupt the ventilation and drainage functions of the auditory tube. The pressure in the tympanic cavity decreases, there is a fullness of blood vessels, mucoid swelling of the mucosa and the formation of serous exudate. Parallel tubogenic infection can lead to the development of acute purulent inflammation in the middle ear. In children with adenoid vegetations, tubotites, exudative otitis, acute medium purulent otitis are often observed. Violation of the ventilation function of the auditory tube leads to restriction and complete cessation of air intake through the Eustachian tube, that with constant absorption of oxygen by the mucous membrane causes a decrease in pressure in the middle ear.

Treatment. Given the important role of the lymphoid tissue of the nasopharynx in the formation of local immunity of the upper upper respiratory tract, it is necessary to expand indications for conservative methods of treatment and try to avoid unreasonable surgical interventions. The absolute indication for adenotomy is: • obstructive sleep apnea syndrome; • prolonged purulent discharge from the ear in chronic otitis media that do not respond to conservative treatment; • recurrent otitis media in children, accompanied by accumulation of exudate in the middle ear cavity and the development of conductive hearing loss; • chronic purulent sinusitis, not amenable to conservative treatment; • chronic adenoiditis, accompanied by frequent respiratory infections and not amenable to conservative treatment. When adenoids are combined with hypertrophy of the palatine tonsils, 2 operations are performed simultaneously: first tonsillectomy, and then adenotomy.

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