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OPTIMIZATION OF THE TREATMENT OF EXUDATIVE OTITIS MEDIA IN CHILDREN

Azimova K.I.
Jo'raqulov S.Z.
ALFRAGANUS UNIVERSITY
NON-GOVERNMENT HIGHER EDUCATION ORGANIZATION, Uzbekistan
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ABSTRACT

Exudative otitis media is one of the most common diseases in children, the acute process becomes protracted. Among acute inflammatory diseases of the middle ear, a special place is occupied by exudative otitis media. Under the influence of various factors, it can become chronic, and also lead to hearing loss with subsequent defects in the formation of speech and intelligence of the child. Exudative otitis media in children is one of the urgent problems of pediatric otorhinolaryngology.

The main pathogenetic factor in the development of the disease is the dysfunction of the auditory tube, its infection with various agents. There are a large number of methods for diagnosing impaired patency of the auditory tube, but most of them are difficult to perform in young children. Exudative otitis media is a disease of the middle ear, characterized by exudate and hearing loss in the absence of pain, with a intact tympanic membrane. At the beginning of exudative otitis media, a vacuum is formed in the tympanic cavity (hydrops ex vacuo). As a result of dysfunction of the auditory tube, oxygen is absorbed, the pressure in the tympanic cavity drops and, as a result, a transudate appears. The high density of goblet cells and mucous glands produce a greater viscosity and density of the secret, turning it into exudate, which is already more difficult or even impossible to evacuate through tympanostomy. In the fibrous stage, degenerative processes begin in the mucous membrane of the tympanic cavity: goblet cells and secretory glands undergo degeneration; mucus production decreases, then stops completely, fibrous transformation of the mucous membrane occurs with the involvement of the auditory ossicles in the process. The main clinical manifestations of exudative otitis media can be said: hearing loss; feeling of fullness in the ears; autophony; nasal congestion; sensation of fluid transfusion in the ear cavity. In addition, viral infections are considered a predisposing factor for the development of otitis media, as they contribute to the occurrence of a secondary bacterial infection.

Mechanical disturbance of the patency of the auditory tube can occur due to adenoid vegetations, hyperplasia of the tubal tonsils and tubal ridges, the presence of neoplasms in the nasopharynx, deviated nasal septum, hypertrophy of the posterior sections of the inferior and middle turbinates, post-traumatic cicatricial changes, dysfunction of the muscles of the soft palate. Hyperplastic palatine tonsils can be located in a deep niche and block the pharyngeal

mouths of the auditory tubes, leading to the development of obstructive dysfunction. With inflammation of the nasopharyngeal tonsil, especially near the tubal opening, tubal dysfunction occurs, which subsequently leads to the development of repeated episodes of otitis media. For the treatment of serous otitis media, anti-inflammatory therapy is necessary, aimed at freeing the middle ear cavity from exudate through natural pathways, i.e. through the auditory tube. It is required to remove the inflammatory edema in the nasopharynx and in the auditory tube. Complete restoration of hearing is a sign of the child's recovery. Drug therapy for treatment uses a wide range of effective physiotherapy procedures, which will significantly speed up the healing process and in most cases do without surgery.

Treatment is based on improving the patient's condition, reducing symptoms and getting rid of etiological factors. Optimization of treatment occurs every year. Ultrasound therapy with the UZOL device (has a decongestant and anti-inflammatory effect on the nasal cavity, nasopharynx and fistula of the auditory tubes), laser therapy (anti-inflammatory, antibacterial effect), electrophoresis on the temporal bone area (this improves blood circulation in the middle ear, has an anti-inflammatory, absorbable effect), blowing the auditory tubes and pneumomassage of the tympanic membrane has the effect of mechanically opening the auditory tubes to evacuate the secret, making the membrane more elastic and supple, and restoring the ventilation of the middle ear. In more complex, lengthy processes, catheterization of the auditory tubes is used, which allows the administration of drugs directly into the anastomosis of the auditory tube, which will have a more pronounced anti-inflammatory and decongestant effect and thereby speed up the healing process.

Blowing the auditory tube is used in various ways:

- catheterization of the auditory tube;
- blowing through Politzer;
- Valsalva experience.

In the treatment of patients with exudative otitis media, physiotherapy is widely used - intra-ear electrophoresis with proteolytic enzymes, steroid hormones and antibiotics. Treatment of exudative otitis media is always complex and is aimed at evacuating the secret from the tympanic cavity, restoring the function of the auditory tube. Perhaps the option of using conservative therapy and surgical methods of treatment, in some patient physiotherapy is used. Conservative methods of treatment include both general and local therapy. Local therapy includes the use of the introduction of hormones, enzymes, vasoconstrictors into the tympanic cavity, blowing the auditory tube. To change the rheological properties of the exudate and improve the drainage function of the auditory tube, mucoactive medicinal substances are used: mucokinetics, mucoregulators, mucolytics.

A widely known drug therapy is antibiotic therapy. Depending on the etiological agent, the antibiotic is selected separately. Antihistamines work by blocking the action of histamine on H1 receptors through a competitive inhibition mechanism. The antiallergic effect of these drugs relieves swelling of the mucous membrane, helping to restore the patency of the auditory tube, improve ventilation of the tympanic cavity and thereby eliminate tubal dysfunction, in the pathogenesis of which the allergic component plays a role. With the ineffectiveness of conservative therapy, the best way is to carry out surgical treatment. Removal of exudate,

restoration of hearing function and prevention of recurrence of the disease. Shunting of the tympanic membrane and the installation of a special shunt has become widespread. Through the installed shunt, special drugs are introduced that help thin the exudate. This improves the flow of exudate from the cavity. Optimal treatment improves the course of the disease. Reduces complications that can aggravate the condition of patients.

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