

Tactics of Treatment of Recurrent Purulent Otitis in Children

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Abstract: One of the most frequent acute purulent-inflammatory diseases of the middle ear in children is recurrent purulent otitis media. The main causes of the disease are premature birth, epidemics of acute respiratory infections among children, a tendency to family allergies, artificial nutrition, low immunity, negative factors of life and work, exudative diathesis, rickets, vitamin deficiency. The aim of our study was to study the features of the clinical course of recurrent purulent otitis media in children and the effectiveness of complex treatment. 21 children under the age of 5 were involved in the examination. All patients underwent a comprehensive clinical and laboratory examination. At the same time, all patients were consulted by a pediatrician and other necessary specialists. Microscopic examination of the smear from the ear revealed an increased content of aerobic microbes. It was found that 12 of the examined patients had acute rhinosinusitis, adenoids, 10 had acute respiratory diseases, zotilium, acute bronchitis, exudative diathesis. In all examined patients, the otoscopic picture corresponds to the clinical picture of acute inflammation. The external auditory canal was cleaned daily from purulent secretions, a 0.05% solution of nasivin was instilled into the nasal cavity and washed with antiseptic solutions. A local antibiotic and antiseptic steroid mixtures were injected into the middle ear through the external auditory canal. All the sick children underwent physiotherapy procedures. Recurrent otitis media is a disease with complex pathogenetic factors that requires an integrated approach to treatment and diagnosis.

Key words: recurrent otitis media, aerobic microbes, adenoids, middle ear, adenotomy

Relevance of the work. One of the common acute purulent-inflammatory diseases of the middle ear in children is recurrent purulent otitis media. Recurrent suppurative otitis media in children is very common in both hot and cold climates of the world and has been in the constant attention of researchers for a long time, so there is a lot of information in the literature [2, 5, 7,10,11].

Recurrent purulent otitis media in children accounts for 0.7-1.5% of all diseases of the ENT organs, 25-30% of all otitis media in children and is most often found in young children. Scientific studies show that 90% of children under 3 years of age may experience acute otitis media at least once in their lives [4, 6, 8].

The main causes of the disease are premature birth, epidemics of acute respiratory infections among children, a tendency to family allergies, artificial nutrition, low immunity, negative factors in everyday life and work, exudative diathesis, rickets, vitamin deficiency [1, 3,9].

In the pathogenesis of recurrent purulent otitis media in children, swelling of the nasal mucosa, enlargement of the adenoid gland, enlargement of the inferior nasal turbinates and palatine folds due to inflammation cause disruption of the conductivity of the auditory tube, and as a result, negative pressure is created in the tympanic cavity, resulting in increased vascular permeability, in transudate collects in the tympanic cavity, and as a result of the addition of bacterial and other microflora, symptoms of inflammation appear [1, 2, 7, 8].

It is known that in the treatment of recurrent purulent otitis media in children, antibiotics, nasal vasoconstrictors, antihistamines, ear drops and, if necessary, anesthetics are used. Despite this, rapid relapses and complications of the disease are observed. This shows the importance of a differentiated approach in treating the disease.

The purpose of the study is to study the etiology, pathogenesis, features of the clinical course of recurrent purulent otitis media in children and evaluate the effectiveness of complex treatment.

Research methods and sources. 21 children under the age of 5 years who were being treated in the ENT department of the regional multidisciplinary children's medical center were involved in the examination. There were 12 boys and 9 girls. It was found that the disease was unilateral in 14 patients, bilateral in 7 patients.

All patients underwent a comprehensive clinical and laboratory examination (otoscopy, rhinoscopy, killer whale rhinoscopy, pharyngoscopy, radiography of the nasal cavities). Moreover, all patients were consulted by a pediatrician and other necessary specialists.

A microscopic examination of a smear from the ear revealed an increased content of aerobic microbes (Streptococcus pyogenes - 12%, Staphylococcus aureus - 8%, Haemophilus influenzae - 32%, Streptococcus pneumoniae - 28%), fungi (Aspergillus - 8%, Candida -7%, mucoraceae -3%, monosporium -2%).

It was found that 12 of the examined patients had acute rhinosinusitis, adenoids, and 10 had acute respiratory diseases, zotylamide, acute bronchitis, and exudative diathesis.

Survey results.In the children's clinic, it was observed that the disease often begins with the absence of pain in the ear, no increase in body temperature, and then begins with the appearance of a weeping, purulent, odorless discharge from the ear. In all examined patients, the otoscopic picture corresponds to the clinical picture of acute inflammation. Redness, infiltration, swelling and bulging of the eardrum were detected. During rhinoscopy, purulent mucous discharge, hypertrophy of the nasal turbinates and difficulty breathing through the nose were observed. At the same time, the child was found to be restless, have a low-grade fever, and an increase in the amount of ESR in the blood test. A reduction of 10-20 dB was observed by hearing aid type.

Therapeutic measures for recurrent purulent otitis media consisted of a number of measures. The main one was to ensure the removal of pathological discharge from the middle ear; it was cleaned of purulent discharge daily, the nasal cavity was instilled with a 0.05% solution of Nazivin and washed with antiseptic solutions (1:5000 furatsilin, 1% dioxidine) according to the Prots method. A local antibiotic (ciprofloxacin) and antiseptic steroid mixtures (dioxidine + hydrocortisone + adrenaline) were injected into the middle ear through the external auditory canal. This treatment method was carried out along with the application of 0.1% adrenaline to the epiglottis. All sick children underwent physiotherapeutic procedures (microwave, UHF, ultraviolet irradiation, nasal and endoauricular).

Adenotomy was performed in 12 patients with nasopharyngeal hypertrophy.

After treatment, all patients examined experienced a significant decrease in clinical symptoms. On the 2-3rd day of treatment, swelling of the nasal mucous membranes returned, nasal discharge decreased, nasal breathing improved, and discharge from the ears stopped. On the 5-7th day of the disease, the redness on the eardrum disappeared and the perforation healed. Hearing was completely restored in all patients.

As a result of general complex treatment, 19 patients were completely cured. Only 2 patients had a chronic disease.

Conclusion. Thus, recurrent otitis media is a disease with complex pathogenetic factors that requires an integrated approach to treatment and diagnosis, research into prevention methods taking into account etiological and epidemiological factors. The creation of new treatment methods based on advanced technologies and their introduction into clinical practice can significantly improve the results of treatment of this disease.

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