



CONSERVATIVE TREATMENT OF EXACERBATION OF CHRONIC SUPPURATIVE OTITIS MEDIA

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Introduction

Chronic suppurative otitis media (CSOM) chronic inflammation of the Eustachian tube of the middle ear, the mastoid cavity and mastoid cells. It is the most common infectious ear disease in children, as well as in young people. CSOM is characterized by chronic, periodic or persistent otorrhea for at least 2 weeks through perforation in the eardrum.

Antibacterial agents are the most commonly used treatment for CSOM. They can be used locally (in the form of drops, ointments on the affected area) or systemically. It is preferable to use local antibacterial drugs or photodynamic therapy in uncomplicated CSOM. The advantage of these is related to the absence of gastrointestinal disturbances and other systemic negative effects, high concentration in the center of infection, ease of use and high efficiency.

At present, against the background of the emergence of a large number of different synthetic antibiotics, the microbial flora of CSOM has undergone clear changes. The emergence of a large number of polyresistant strains and changes in the bacteriological profile of patients with CSOM make clinicians search for drugs that are effective in the treatment of this disease. Antibacterial agents are the most commonly used treatment for CSOM. They can be used locally (in the form of drops, ointments on the affected area) or systemically.

Objective:

To study the effectiveness of treatment of exacerbation of chronic tubotimpanal purulent otitis media with the drug Otofa with the active ingredient Rifamycin.

Materials and Methods

A retrospective analysis of 37 case histories of patients who applied to the ENT department with a diagnosis of "exacerbation of chronic suppurative otitis media" in the period from January 2022 to December 2022. Patients aged 18 to 73 years (average age 45.8 ± 6.4 years) with a disease duration from 2 to 34 years (average duration 26.7 ± 2.4 years).

The study did not include patients with diabetes mellitus who are allergic to antibiotics of this series, as well as patients with complaints of severe itching in the





ears, who had a history of otomycosis, otoscopy showed signs of fungal lesions, namely white plaque in the bone part of the external auditory canal, black patches on the skin of the external auditory canal.

After hospitalization, all patients underwent standard anamnesis collection, endoscopic examination of ENT organs, tonal threshold audiometry, if local complications were suspected (granulation or cholesteatoma development), computed tomography of the temporal bones was performed, microbiological examination was performed by taking swabs from the ear before starting antibiotic therapy.

Patients received drops for 7 days, and for 5 days — on plug with the drug pre-applied to it 2 times a day, and in the following days — by instilling 3-4 drops into the external auditory canal 3 times a day. The patients had an ear toilet. Prior to the start of the study, none of the patients had received antibacterial treatment. Systemic antibacterial therapy was not prescribed to patients. Treatment was started before the results of bacterial inoculation of the contents from the ear for microflora and antibiotic sensitivity. Additionally, decongestant nasal drops were prescribed to patients and the palatine tonsils were sanitized in the presence of chronic tonsillitis. The results of the study were evaluated in points on the 3rd, 5th, 7th and 10th days from the start of treatment.

The criteria of treatment efficiency were the normalization of the general condition of the patients, the cessation of pathological discharge from the ear, and the normalization of the otoscopic picture. Treatment is usually started 2-4 days after the first symptoms of chronic otitis media appear.

Results

During otoscopy and otomicroscopy, free mucopurulent discharge in the external auditory canal after ear toilet, as well as hyperemia of the eardrum, central perforation were determined during treatment. The perforation sizes ranged from 25 to 50% of the eardrum. Hyperemia of the mucous membrane of the tympanic cavity was determined. Percussion and palpation of the mastoid process area were painless. With threshold tonal audiometry, the 1st degree of hearing loss prevailed in 28 patients, the 2nd degree in 5 patients, 3rd degree — in 3 patients, 4th degree — in 1 patient.

Pseudomonas aeruginosa and *Staphylococcus aureus* were most often sown in smears. When determining the sensitivity of pathogenic microflora, a high degree of sensitivity to rifamycin was revealed. In patients receiving Otofa topically (the active ingredient is rifamycin), relief of symptoms such as pulsating noise and





pain was noted as early as the 3rd day of application of Otofa drops. As for the otoscopy data, the severity of purulent discharge from the ear in patients significantly decreased by 5th day after the start of therapy with Otofa ear drops

Summary

The results of the analysis show the high effectiveness of treatment of patients with exacerbation of chronic purulent tubotympanic otitis media with rifamycin-based drops, due to the wide antibacterial spectrum of the drug and the presence of macrogol in the composition. Thanks to the macrogol, the contact time of the active substance with the mucous membrane is prolonged, long-term exposure and constant the bactericidal concentration of the antibiotic at the site of application. In addition, the presence of macrogol in the composition ensures high activity of the Lymph in the presence of a pathological discharge. It is important to note that Otof drops, unlike most other ear drops, are made on a water basis, do not contain alcohol, this ensures safe and painless injection of the solution into the middle ear in the presence of a perforation of the eardrum.

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