Volume 3, Issue 3, March 2025 ISSN (E): 2938-3765

NEW APPROACHES TO TREATMENT METHODS FOR ACUTE OTITIS

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Abstract

The problem of acute inflammatory process of the middle ear has been relevant for ENT specialists for many years. It is known that foci of purulent infection can form in the cavities of the middle ear, which are the cause of persistent inflammatory process in the middle ear. The problem of acute otitis media is even more relevant due to its prevalence in early childhood: more than 65.0% of children under 3 years of age suffer from acute otitis media 1-2 times and 35.0% of children get sick 3 times or more functions. Acute otitis media in most cases with timely and adequate treatment ends with recovery and full restoration of hearing. However, with a decrease in the reactivity of the body, inadequate antibacterial therapy and untimely surgical treatment, acute inflammation of the middle ear can lead to persistent impairment of hearing function, chronicity of the process and even intracranial complications. Currently, various methods of treating exudative otitis media are used in clinical practice. They include conservative therapy methods and surgical treatment methods. Despite the variety of existing methods of treating exudative otitis media, they are not effective enough: relapses of the disease and the development of persistent conductive hearing loss are noted. Therefore, the development and use of new effective methods of treating exudative otitis media in children is an urgent problem of modern otolaryngology.

In recent years, researchers have paid increased attention to traditional medicine, and many specialists widely use them, in particular, occupational therapy in the treatment of diseases of various organs and systems. Today, therapists effectively use occupational therapy for hypertension, angina pectoris, atherosclerosis, diabetes mellitus; gynecologists - for adnexitis, mastitis; surgeons - for panaritiums, furuncles, carbuncles, thrombophlebitis, hemorrhoids, and for plastic surgery of pharynx and larynx defects.

Currently, hirudotherapy is being actively introduced into otolaryngology. The use of hirudotherapy has become possible due to the development of new theoretical knowledge substantiating the mechanisms of action of medicinal leeches: neurohumoral, anti-inflammatory, desensitizing, anti-edematous, distracting, local effects of biologically active substances in the secretion of their salivary glands.

These circumstances formed the basis for conducting this study on the use of hirudotherapy in the complex conservative treatment of children with exudative otitis media.

Keywords: Acute otitis, infection control, handwashing, sanitation, inflammatory process.

INTRODUCTION

The aim of the work. Improving the effectiveness of treatment of acute otitis media by using CO2 laser for myringotomy and taking into account the pathology of the nasopharynx, nasal cavity and paranasal sinuses.

Research Methods

The work was carried out at the Department of ENT Diseases of Uzbekustan State Medical University on the basis of City Clinical Hospital No. 50. A comprehensive clinical and instrumental examination and treatment of 140 patients with AOM was carried out. Patients were observed from 5 months to 1 year, which allowed to evaluate the effectiveness of the treatment. The average age of patients was 34.2 years - the most socially active, which confirmed the importance and relevance of this problem. AOM disease was more often observed in women than in men (91 people - 65.0% and 49 patients - 35.0%, respectively). Unilateral middle ear damage was noted in 128 (91.4%) patients, bilateral - in 12 (8.6%) patients. All patients underwent a comprehensive examination. The examination plan included general clinical and radiation studies. At the clinica study stage, complaints and anamnesis of the patient, laboratory diagnostics, examinations by other specialists were collected. Otomicroscopy was performed every day, starting from the moment the patient was admitted to the hospital until full recovery using a MOLLER – WEDEL INTERNATIONAL (Germany) viewing microscope. 1. Complex therapy of exudative otitis media in children using hirudotherapy is a highly effective treatment method. In the immediate and long-term observation periods, a positive treatment result was achieved in 76.7% and 71.7% of patients, respectively. Hirudotherapy as part of complex treatment in children with exudative otitis media improves the clinical condition of patients, reduces the number of relapses of the disease, is well tolerated by patients, does not cause complications and side effects. Complex therapy using medicinal leeches is most effective in patients with catarrhal, secretory and mucosal stages of exudative otitis media. In the fibrous stage of exudative otitis media in children, complex therapy using hirudotherapy improves the general condition of patients, relieves tinnitus and does not affect hearing function. With traditional conservative therapy of children with exudative otitis media, a positive result was established in 53.3% of patients in the immediate observation period, and in 38.3% in the long-term. Complex therapy of children with exudative otitis media, using hirudotherapy, according to the immediate and long-term treatment results, is a more effective treatment method compared to traditional conservative therapy.

Results

57 (40.7%) patients complained of mucopurulent discharge from the ear, most patients noted a decrease in pain intensity after the onset of suppuration. A greater amount of discharge was noted in the morning and after sleep. The duration of the disease before admission to the clinic varied - from 1 to 30 days from the onset of the disease. It should be noted that patients complained most actively on the 2nd-3rd day from the onset of the disease. Late referral of patients for specialized care was noted in patients with ineffective conservative therapy, which may indicate a persistent course of the disease and low effectiveness of the treatment methods used. Otomicroscopy was performed daily for patients with AOM. The most frequent otomicroscopic signs were hyperemia

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of the eardrum, smoothing of the identification marks and its bulging of varying degrees of severity, in 57 patients perforation of the eardrum and mucopurulent discharge were determined. Audiometry was performed on the 1st day of admission for all patients with acute otitis media. For patients with acute otitis media with fluid in the tympanic cavity, the audiometric examination was characterized by the presence of a bone-air gap of 10-40 dB over the entire frequency range. All examined patients (140 people) with acute otitis media were divided into 2 groups depending on the stage of the disease according to the classification of I.V. Davydovsky (1969): purulent form of AOM was diagnosed in 57 patients, catarrhal - in 83 patients. Complex therapy of patients suffering from AOM was prescribed in accordance with the stages of acute inflammation of the middle ear. All patients received basic therapy, which consisted of: broad-spectrum systemic antibacterial therapy. The drugs of choice for empirical therapy were penicillins, fluoroquinolones were mainly prescribed to patients with concomitant pathology of the ENT and nasopharynx. The drugs were used mainly parenterally. The duration of use depended on each specific case, but was not less than 7 days; desensitizing therapy (desloratadine, ebastine, cetirizine, etc.) from 7-14 days; mucolytic and secretolytic (acetylcysteine, etc.) - a course of 7-14 days; general analgesic therapy (ketorol, ketorolac) until the period of pain relief.

Patients also underwent local treatment, which included: ear drops (selected depending on the form of acute otitis media). In the catarrhal form - Osmotol, compress according to Tsitovich, Otipax, Tsipromed; in the purulent form of acute otitis media, transtympanic injection of Miramistin and Adrenaline 0.1% solution, Otofa, Dalacil was performed.

- vasoconstrictors - drops, sprays (naphazoline, oxymetazoline, tetryzoline, xylometazoline, etc.) or combination drugs containing, in addition to a decongestant, an antibiotic or secretolytic; - catheterization of the auditory tube with a solution of 0.1% Adrenaline and Hydrocortisone, Politzer's blowing of the auditory tubes, pneumatic massage of the eardrums, after the disappearance of the pain syndrome and reactive phenomena;
- physiotherapy (mud applications to the mastoid process area, UHF, electrophoresis with a 5% solution of potassium iodide and laser therapy).

Conclusions

1. Myringotomy using a CO2 laser equipped with a flash scanner is indicated when conservative therapy is ineffective in patients with the catarrhal form of acute otitis media and the presence of pus in the tympanic cavity.
2. The parameters of laser action during myringotomy in patients with acute otitis media were determined experimentally: Ultra Pulse mode, laser radiation power - 18 W, pulse mode duration - 50 ms.
3. A perforation of the eardrum with a diameter of 1.5 mm created by a CO2 laser ensures ventilation of the middle ear for 10-14 days. A perforation of the eardrum with a diameter of 2 mm ensures ventilation of the middle ear for 16-20 days. The period of perforation closure directly depends on the specified perforation size.

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