

RESULTS OF COMPLEX TREATMENT FOR CHRONIC PURULAR EPITYMPANITIS WITH COMPLICATIONS

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Article history:	Abstract:
Received: April 20 th 2024 Accepted: May 14 th 2024	The authors pay special attention to the fact that in chronic purulent epitympanitis, bone tissue is involved in the inflammatory process, and chronic purulent-destructive changes occur in the cells of the mastoid process. Bone osteomyelitis leads to local and intracranial complications. Therefore, during sanitizing operations of the middle ear in epitympanitis, it is necessary to radically remove all foci of destructively altered structures of the middle ear system with exposure of the dura mater of the middle and posterior cranial fossae. The postoperative period of patient management should be aimed at intensive care.

Keywords: chronic purulent otitis media, epitympanitis, local and intracranial complications, radical ear surgery, sanitizing operations.

RELEVANCE OF THE PROBLEM. According to the international classification of diseases, chronic purulent otitis media is divided into two main forms: chronic tubotympanic purulent otitis media, mesotympanitis N-66.1 and chronic epitympanoantral purulent otitis media, epitympanitis N-66.2 [1,5,6,10,13]

With mesotympanitis, catarrhal inflammation of the mucoperiosteum of the middle ear system occurs, epitympanitis is a purulent-inflammatory process involving the bone tissue of the middle ear with destructive changes in the mastoid processes. Due to osteomyelitis of the bone structures of the middle ear, local (mastoiditis, labyrinthitis, facial nerve paresis, etc.) and intracranial complications (meningitis, abscesses of the brain and cerebellum, sinus thrombosis, sepsis) occur.

Local and intracranial complications of an otogenic nature often lead to irreversible consequences and mortality ranges from 10 to 15%. [2,3,4,7,8,9,11,12].

The purpose of our work was to selecttactics of complex treatment for chronic purulent epitympanitis with complications.

MATERIALS AND METHODS OF RESEARCH.Under our supervision in the ENT department of the OMMC there were 28 patients with chronic purulent epiimpanitis. Of these, 21 patients with local, 7 patients with intracranial complications. At the age of 18 - 40 years there were 14 patients, 40 - 60 years - 9 patients and over 60 years - 5 patients.

All patients underwent general clinical examination, MSCT of the mastoid process, MRI of the brain, consultation with a neurosurgeon, neurologist, ophthalmologist, etc.

Treatment for chronic inflammation of the middle ear with destruction of the bone structure of the middle

ear should be surgical. All patients with otogenic complications underwent emergency surgery to eliminate the purulent focus. At the same time, the foci of purulent inflammation were radically sanitized, all the cells of the mastoid process were opened and the lining cells of the mucoperiosteum were cleaned.

But after such operations, very large trepanation cavities are formed and epidermization can take a long time. After epidermization, crusts from the exfoliating epidermis and sulfur from dried serous effusion accumulate in large cavities. When the cavity is filled with crusts and sulfur, ventilation of the cavity is disrupted, which leads to the resumption of the suppurative process and fungal infections.

Many otosurgeons believe that after performing such operations it is necessary to periodically inspect the operating cavity in order to identify and eliminate foci of chronic inflammation remaining in it.

To reduce postoperative relapses during surgery, it is necessary to perform a T-shaped plasty as wide as possible, widening the entrance to the ear canal (Kerner plasty of the ear canal), which provides a good overview of the cavity and the implementation of measures to correct healing. The period of growth of granulation tissue in the trepanation cavity is prolonged. Epidermization of the trepanation cavity is completed when most of the cavity is filled with granulation tissue.

In addition, intensive (antimicrobial, detoxification, anti-inflammatory, dehydration, desensitizing and restorative) therapy was carried out.

The most frequently used antibiotics were beta-lactams, cephalosporins, and rarely macrolides, taking into account the sensitivity of microflora to antibiotics. It should be noted that antibiotics were



often used in combination and intramuscularly administered beta-lactam antibiotics in high doses, intravenous cephalosporins. In order to provide nutrition and detoxification, general strengthening and stimulating therapy was carried out, intravenous native plasma 300-500 ml, 5-10% glucose solution up to 500 ml were prescribed, with the addition of ascorbic acid 5% -4.0 cocarboxylase 2.0 albumin solution 20% up to 200 ml. Dehydration and diuretics were administered; glucose 40% -20.0 mannitol 20% -30.0 diacarb 0.25 1 tablet 1 time per day. Anticoagulants were prescribed in the form of heparin 10 thousand units or Clexane in 100 ml sodium chloride solution intravenously with the addition of aspirin 0.5 g 3 times a day.Patients were provided with careful care, high-calorie enteral nutrition (via a tube if necessary), and symptomatic therapy was prescribed when indicated.

RESULTS AND ITS DISCUSSION.Among those examined, 17 patients were admitted to the clinic in moderate condition, 8 in serious condition, and 3 in extremely serious condition.

Among those examined, local complications were identified: mastoiditis in 9 patients, labyrinthitis in 7 patients and paresis of the facial nerve in 5 patients. Of the intracranial complications, otogenic purulent meningitis was detected in 1 patient, otogenic epidural abscess of the high lobe of the brain in 2 patients, and otogenic sinus thrombosis of the sigmoid sinus in 2 patients.

In most patients, after treatment (epidermization), the trepanation cavity had the correct shape. According to most scientists, when performing radical ear surgery, maximum radicalization is necessary. Other scientists believe that it is necessary to preserve as much as possible the bone and other structures, the auditory ossicles, the remnants of the tympanic membrane, the posterior bone wall of the external auditory canal, the lateral wall of the attic), which are necessary for tympanoplasty.

The classical radical surgery performed on the ear for epitympanitis does not exclude the possibility of creating a new chain of auditory ossicles and performing hearing-improving operations.

Performing a classic radical operation involves the most complete removal of foci of chronic inflammation, radical opening of all cells of the middle ear system and the creation of a single operating cavity. If this simple principle of surgery is not observed, one cannot expect to achieve positive sanitary and functional results.

After surgical treatment, drainage of brain abscesses, removal of a blood clot from the sinus and intensive therapy, the general condition of the patients gradually improved and normalization of clinical and biochemical parameters occurred, which makes it possible to objectively determine the effectiveness of treatment. **CONCLUSIONS:** Thus, the presented system of complex emergency surgical and intensive care made it possible to improve the results of treatment for chronic purulent epitympanitis with complications.

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