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### CLINICAL SYMPTOMS, MODERN EXAMINATION METHODS AND TREATMENT PRINCIPLES OF LABYRINTH DISEASE

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**Abstract**: In this article, special attention is paid to clarifying the factors causing labyrinthitis, pathogenesis, specific clinical signs, important diagnostic factors in the diagnosis of the disease, and modern principles of treatment.

**Key words:** labyrinthitis, etiology (tympanogenic, meningogenic, hematogenous, traumatic), pathomorphological types (limited, diffuse serous, diffuse purulent and necrotic labyrinthitis), differential diagnosis, treatment.

Labyrinthitis is an inflammation of the inner ear that affects hearing and balance. Both pathogenic and saprophytic microflora can cause labyrinthitis. Most cases of viral labyrinthitis occur in adults between the ages of 30 and 60. Viral labyrinthitis is relatively common in adults. Other types of ear infections are more common in children. Bacterial labyrinthitis is very rare. Small children under the age of two are more prone to developing bacterial labyrinthitis. Manifestations of labyrinthitis according to origin:

• Tympanogen (develops as a complication of acute and chronic purulent otitis media).

• Meningogenic (develops as a complication of meningitis).

• Hematogenous (parotitis, scarlet fever, measles, typhoid and similar diseases can occur).

Traumatic (develops in fractures of the base of the brain box).

Tympanogenic labyrinthitis is the most common form of labyrinthitis. During acute purulent otitis media, labyrinthitis develops as a result of increased pressure in the

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middle ear, swelling of the round glass membrane and longitudinal annular ligament under the influence of purulent exudate, and increased permeability to toxins. Later, the secondary tympanic membrane is ruptured, and the damaged part of the tympanic cavity falls into the perilymphatic space of the labyrinth. In chronic purulent otitis media (epitympanitis), labyrinthitis occurs as a result of destruction of the bony wall of the labyrinth under the influence of cholesteatoma and the formation of a fistula (mainly in the horizontal semicircular canal). A granulation barrier is formed in the fistula cavity, which is why clinical symptoms of the disease go on for a long time. When the inflammatory process in the middle ear progresses, the granulation barrier is destroyed, and the process spreads to the membrane labyrinth, causing diffuse purulent labyrinthitis, necrosis of auditory and vestibular receptors.

Meningogenic labyrinthitis occurs more often in children of early age with epidemic cerebrospinal meningitis. The infection travels from the subarachnoid space to the labyrinth via the cochlear ducts or the internal auditory canal, often affecting both labyrinths. At this time, diffuse purulent labyrinthitis occurs, clinical symptoms of the disease do not appear against the background of symptoms of purulent meningitis and is characterized by a complete loss of hearing. It is a very serious disease and often causes the death of the patient. When the process is bilateral, the child becomes deaf for life, if meningogenic labyrinthitis is observed before the age of 2-5 years, that is, when speech is not yet developed, the child is deaf and dumb. remains.

Hematogenous labyrinthitis occurs in mumps, scarlet fever, measles, typhoid and other infectious diseases. The inflammatory process can be serous, purulent or necrotic. Hearing and vestibular function are not completely lost in serous form. Purulent and necrotic forms lead to serious consequences.

Traumatic labyrinthitis occurs in gunshot injuries and fractures of the base of the braincase, when the fracture line passes through the pyramidal part of the temporal bone. Also, iatrogenic labyrinthitis, i.e. during the removal of a foreign body from the ear, damage to the secondary tympanic membrane or longitudinal annular ligament, infection to the perilymphatic space can also occur.

According to pathomorphological aspects, several forms of the disease are distinguished: limited, diffuse serous, diffuse purulent and necrotic labyrinthitis.

#### **Clinical signs**

The most common symptoms are dizziness, hearing loss (from mild to complete hearing loss) and vertigo - the sensation that you or the environment around you is

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moving. These symptoms can range from mild to severe, with some people feeling unable to stand upright. Other symptoms include:

- Different degrees of dizziness
- Nausea, vomiting
- Trembling and unsteadiness when walking
- Coordination disorders
- Spontaneous nystagmus
- Pronounced hearing loss of the type of sound reception
- Noise in the ear
- A feeling of pain and pressure in the ear
- Serous or purulent discharge from the ear
- High body temperature (38 and above)
- Changes in vision, such as blurred vision or double vision

### **Differential diagnosis**

Labyrinth diseases are differentially diagnosed with brain diseases:

Labyrinth disorders are always accompanied by hearing loss or loss.

Vertical and horizontal nystagmus is not observed in labyrinth diseases.

In labyrinth diseases, clinical symptoms gradually decrease (compensated by other organs).

When the vestibular analyzer is stimulated by experiments, complex symptoms are observed in labyrinth diseases - nystagmus, dizziness, nausea, vomiting.

Complications

Complete deafness in the affected ear.

The spread of infection to the meninges and the development of intracerebral complications.

### Treatment

In most cases, symptoms go away within a few weeks. Treatment includes bed rest and medication to help manage symptoms better. You may need additional medication to treat the underlying infection, but antibiotics are often not required because the cause is often viral.

When any vestibular disorders appear, the patient is immediately sent to the ENT department. Treatment is effective at the beginning of the disease, when the activity of the labyrinth has not disappeared.



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Paracentesis of the tympanic membrane is performed in labrinthitis, which occurred as an early complication in the pre-perforation period of acute otitis media, high doses of antibiotics, sulfonamide drugs, desensitization, glucocorticoid, and diuretics are prescribed.

### Conclusion

If labyrinthitis occurs in the late stages of acute otitis media, operative treatment is mastoidotomy, which is performed by opening the antrum and all damaged bone cells bordering the labyrinth.

In chronic purulent otitis media (epitympanitis) with bone damage, it is necessary to surgically open the primary inflammatory site in the ear and carefully search for a fistula in the area of the medial wall of the tympanic cavity and semicircular canals. will be After elimination of purulent foci in limited labyrinthitis, fistula plastic is performed with bone fragments and fascial graft taken from the patient himself.

Labyrinthotomy is performed in necrotic forms of labyrinthitis with the formation of labyrinthogenic brain abscesses and sequestration. In this case, the labyrinth opens through the spinal fossa or promontorium.

#### **REFERENCE:**

1. A.M. Shamsiyev, "Otorhinolaryngology" book, NMIU of Uzbekistan, 2019.

2. S.A. Hasanov, "Otorhinolaryngology" book, Sano-standard publishing house, 2013.

3. U.S. Hasanov, "Modern examination methods in otorhinolaryngology" book, Tashkent, 2019.

4. Q.Q. Kasimov, "Otorhinolaryngology" book, Tashkent, 2019

5. N.J. Khushvakova, "Emergency first aid in otorhinolaryngology" book, Medical Mirror Publishers, Samarkand 2021

6. A.Q. Khojayeva, "Practical Otorhinolaryngology" book, Tashkent, 2006.



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