

Secretory otitis

Otitis media secretorica (OMS, secretory mesotitis, chronic tubotympanic catarrh, **catarrhus tubotympanalis chronicus**, glue ear) is a **sterile inflammation** of the middle ear, in which there is fluid retention behind the intact eardrum. With prolonged duration, atrophy and retraction of the tympanic membrane may occur with subsequent adhesive otitis (incorrectly atelectasis of the middle ear). It occurs mainly in children.

Classification

- We divide according to duration into **acute** (less than 3 weeks), **subacute** (under 3 months), **chronic** (over 3 months).
- Division according to secretion into **serous** (serotympanon), **mucous** (mucotympanon), **seromucous** (seromucotympanon).

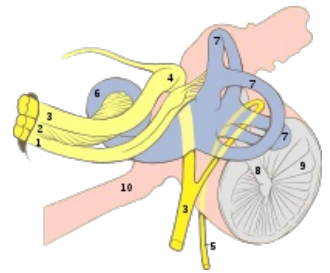
Epidemiology

It is one of the most common childhood diseases, showing a high degree of correlation with inflammation HCD.

Etiopathogenesis

OMS arises as a result of **Eustachian tube dysfunction** (impairment of ventilation, barrier and drainage function). Eustachian tube blockage can be both functional and mechanical. The most common cause of obstruction is **adenoid vegetation**, deformities of the nasal septum, inflammatory swelling of the mucous membrane, VVV of the nasopharynx (clefts), tumors of the nasopharynx, **cholesteatoma**, **hotbeds of HCD infection**.

Dysfunction of the tube → negative pressure in the middle ear → indentation of the tympanic membrane, hyperemia, exudation, transudation → change of the epithelium to cylindrical with goblet cells, secretion changes to mucinous → fibrotization exudate (cholesterol is formed from breakdown products, which precipitates into crystals = cholesterol granulomas) → the formation of adhesions between the middle ear ossicles, the eardrum and the promontory.



Head nerves and selected structures of the inner and middle ear: 1. Nervus vestibularis, 2. Nervus cochlearis, 3. Nervus intermediofacialis, 4. Ganglion geniculi, 5. Chorda tympani, 6. Cochlea, 7. Ductus semicirculares, 8. Malleus, 9. Membrana tympani, 10. Auditive tube



Cholesteatom

Contributing Factors

- **overall exogenous** - winter period, stay in collective facilities (nursery, kindergarten);
- **total endogenous** - immaturity or disorder of the immune system, allergies;
- **local** - craniofacial deformities, Kartagener's syndrome;
- in children, the angle of the ET towards the horizontal is 10° (in adults 45°), which, especially when lying down (a fairly common position in children), increases the possibility of secretions from the nasopharynx entering the ear.

Clinical symptoms

Among the main symptoms we include **conductive hypacusia**, **feeling of the ear sinking** and **feeling of fluid overflowing in the ear**, **humming**, **autophony**, exceptionally vertigo.

Diagnostics

- **anamnesis** (HCD catarrh) and **physical examination**;
- **otoscopy**: the tympanic membrane is pushed in, the manubrium is almost horizontal, we can see the liquid level behind the tympanic membrane;
- **pneumotoscopy** - poor mobility of the ear drum;
- **audiometry**: disease causes conductive hearing loss of 30–40 dB;
- **tympanometry**: we get a flat tympanometric curve - type B.

Differential diagnosis

- hemotympanum, OMA in the initial stage.

Treatment

1. **rehabilitation** inflammation of the upper respiratory tract, adenoid vegetations are surgically removed (adenotomy), we take care of the patency of the nose;
2. **paracentesis**, aspiration of secretions under a microscope, with the introduction of a ventilation tube;
3. in the absence of an infection – an effort to aerate the middle ear by excess pressure using the so-called **Politzer shower** (the method is referred to in common slang as "peeping" or "politzerizing");
4. administration of decongestants, anti-allergic treatment, chewing gum to stimulate swallowing.

Links

Related Articles

- Classification of otitis media
- Acute tubotympanic catarrh
- Complications of otitis media
- Acute inflammation of the middle ear (Otitis media acuta, OMA)
- Otitis media recidivans
- Chronic otitis media (Otitis media chronica, OMC)
- Hearing

References

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- Questions by J. Beneš – sources of information: lectures and textbooks listed below:
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