

Otosclerosis

Otosclerosis (otosclerosisa, **otospongiosis**, otospongiosa) is an AD or multifactorial hereditary disease of the capsule of the labyrinth. **Women** are more often affected. The median incidence is **35 years**. In women, the disease often manifests itself during pregnancy. The incidence (diagnosed, histologically verified) is about **1%**.

File:Otosclerosis.png

Otosclerosis - diagram

Pathogenesis

There is gradual spongification (sclerotization) of the capsule of the labyrinth, especially in the area of the oval window (fenestra ovalis), which leads to fixation of the stirrup and subsequent narrowing of the *labyrinth lumen*. Finally, the lumen disappears completely and is replaced by fibrous tissue (*labyrinthitis ossificans*).

Clinical symptoms

The main clinical signs include:

- **hypacusia** (the hearing defect in otosclerosis can be conductive, mixed or even perceptual; in the case of a perceptual defect, the oval window is not affected by otosclerosis and we speak of the so-called *retrocochlear otosclerosis*);
- **vertigo**;
- **tinnitus**.

Diagnostics

- **Otoscopy** - the eardrum is normal.
- **Audiology** - we use audiology to diagnose conductive hearing loss.
- **Tympanometry** - we get the A curve.
- **Stapedial reflex** is disabled.

Treatment

The treatment is symptomatic, trying to correct the transmission defect. It can be divided into conservative and surgical treatment.

Conservative therapy

is indicated in patients with cochlear otosclerosis and when surgical treatment is impossible. Includes p.o. application of fluorides.

Surgical treatment: we distinguish 2 methods:

- **Stapedectomy** - is the complete removal of the stapes + its replacement with a so-called Schuknecht prosthesis.
- **Stapedotomy** - removal of only the suprastructures of the stirrup (arms and head) + piston implantation.

Stapedoplasties are demanding operations with the possible occurrence of serious postoperative complications (meningitis, labyrinthitis, deafness).

Links

Related Articles

- Otosclerosis/PGS/diagnosis
- Examination methods in ENT/overview

Source

- BENEŠ, Jiří. *Studijní materiály* [online]. ©2007. [cit. 2009]. <http://jirben2.chytrak.cz/materialy/orl_jb.doc>.

References

- KLOZAR, Jan. *Speciální otorinolaryngologie*. 1. edition. Prague : Galen, 2005. pp. 224. ISBN 80-7262-346-X.