

# Hearing Loss

**Hearing loss** (hypacusis) is a partial reduction of hearing. Approximately 5% of the population in the Czech Republic is affected by hearing loss, mostly older individuals with presbycusis. Both severe and mild degrees of hearing loss can bring with them a significant handicap in the professional (e.g. musicians) and social field. It therefore significantly reduces the quality of life, in some cases hearing loss can result in the psychosocial isolation of the patient. It can also be a symptom of a more complex and serious disease (e.g. brain tumor). Sudden hearing loss is an ENT condition that needs to be addressed urgently.

Hearing disorders can be of central or peripheral origin. Peripheral hearing loss is much more common than central hearing loss.

## Central hearing loss

**Central hearing loss** occurs as a result of damage at levels II-IV. auditory pathway neuron. The nature of the damage is varied, it always depends on the location and size of the lesion, most often it is a trauma or a tumor. Therefore, we often observe a focal neurological deficit with hearing loss. The clinical picture can sometimes lead us to a "false" trace of phatic disorder or intellectual disorder.

## Peripheral hearing loss

**Peripheral hearing loss** can be conductive or perceptual.

### Conductive hearing loss

The cause may be an obstruction in the outer or middle ear; it can be a sebaceous plug or inflammation in the external ear canal, perforation of the eardrum, acute or chronic inflammation of the middle ear, catarrh of the Eustachian tube, otosclerosis, etc.

### Perceptual hearing loss

Perceptual hearing loss occurs as a result of damage to the inner ear or auditory nerve. It can be further divided into cochlear and retrocochlear. Hearing losses are usually uneven, patients have difficulty understanding even after increasing the intensity of speech. They often suffer from diplacusis:

- diplacusis dysharmonica - the tone is heard at a different pitch in each ear;
- diplacusis echotica - hearing sound in one ear is delayed.

### Sensorineural cochlear hearing loss

This is damage to the cochlea (hair cells); etiologically, it can be presbycusis, socioacusis, Ménière's disease, ischemic or toxic damage to the inner ear. In this case, the transmission system is fine, supracochlear damage must be distinguished in the differential diagnosis.

### Perceptive retrocochlear hearing loss

The most common cause is tumors of the pons. In 70 % of cases it is a vestibular schwannoma. The remaining 30% are due to meningioma, dermoid cyst, neurofibromatosis, toxic or parainfectious involvement.

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