

Impedance audiometry with tympanometry and stapedial muscle reflex evaluation

Impedance audiometry with tympanometry is a non-invasive and painless specialist examination which consists of several stages.

This is done using a special probe with a tip tailored to the size of the patient's ear, which is inserted into the outer ear canal. The examination assesses the presence of reflexes from the stapedial muscle and patency of the Eustachian tube.

How is the examination performed?

Tympanometry is performed in a sitting position, and the probe – which is inserted into the ear – connects with a tympanometer by three tubes, i.e. a microphone, a sound generator and a pump increasing pressure in the ear canal. During the examination, the patient should not speak or swallow saliva. Stapedial muscle reflexes are checked during the generation of sounds at a strictly defined frequency (500, 1,000, 2,000 and 4,000 Hz).

Contraindications:

- earwax or foreign body in the ear canal,
- no tympanic membrane or visible perforation,
- ear surgery within 6 weeks prior to examination,
- not recommended for infants under 7 months of age.

The examination **may be** performed in patients of all ages (including young children) even with various types of chronic diseases.

How to prepare?

Before audiometry/tympanometry, accurate cleansing of the ear from the residual earwax is necessary. In the case of spray/fluid use, it is necessary to stop using these products at least two days before the examination. The examination can be performed only when the ears are dry and clean.

What to bring?

Current paper referral with a signature and stamp of the physician or e-referral number.