PEDIATRIC NON-ORGANIC HEARING LOSS- A CASE REPORT

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Background:

Non organic hearing loss is unexplained hearing loss that can affect both adults and children. Prevalence is 1%-5% and incidence in children is 1%-12%. It tends to surface around age 11 in children.

Aim: To highlight a case report on non-organic hearing loss in a child

Brief History:

An 11-year-old male patient has been experiencing reduced hearing in the left ear and recurrent upper respiratory tract infections. There was no history of ear discharge, and both tympanic membranes are intact bilaterally.

Method

Upon conducting pure-tone audiometry, results showed mild hearing loss in the right ear and profound hearing loss in the left ear. Tympanometry showed a bilaterally "A" type tympanogram, and reflex threshold measurement could not be conducted. An auditory brainstem response (ABR) testing was conducted, and the results showed bilateral Vth peak present till 40 dBnHL. We also conducted otoacoustic emissions (OAE), which showed a bilateral absent TEOAE.

Result:

After a thorough evaluation, the child was diagnosed with bilateral hearing sensitivity within normal limits.

Discussion:

An 11-year-old boy was diagnosed with hearing loss, but further testing revealed normal bilateral hearing sensitivity. The absence of otoacoustic emission may be due to the child's noisy breathing caused by recurrent upper respiratory tract infections. At my clinical center, the Department of Speech and Hearing, MCHP, Manipal, as a standard clinical practice we consider presence of ABR waveform till 4odBnHL as normal hearing. The child consistently gave poor responses in audiometry, emphasizing the need for careful diagnosis to avoid misdiagnosis.