Sound stimulation aids saccular dysfunction with Meniere disease

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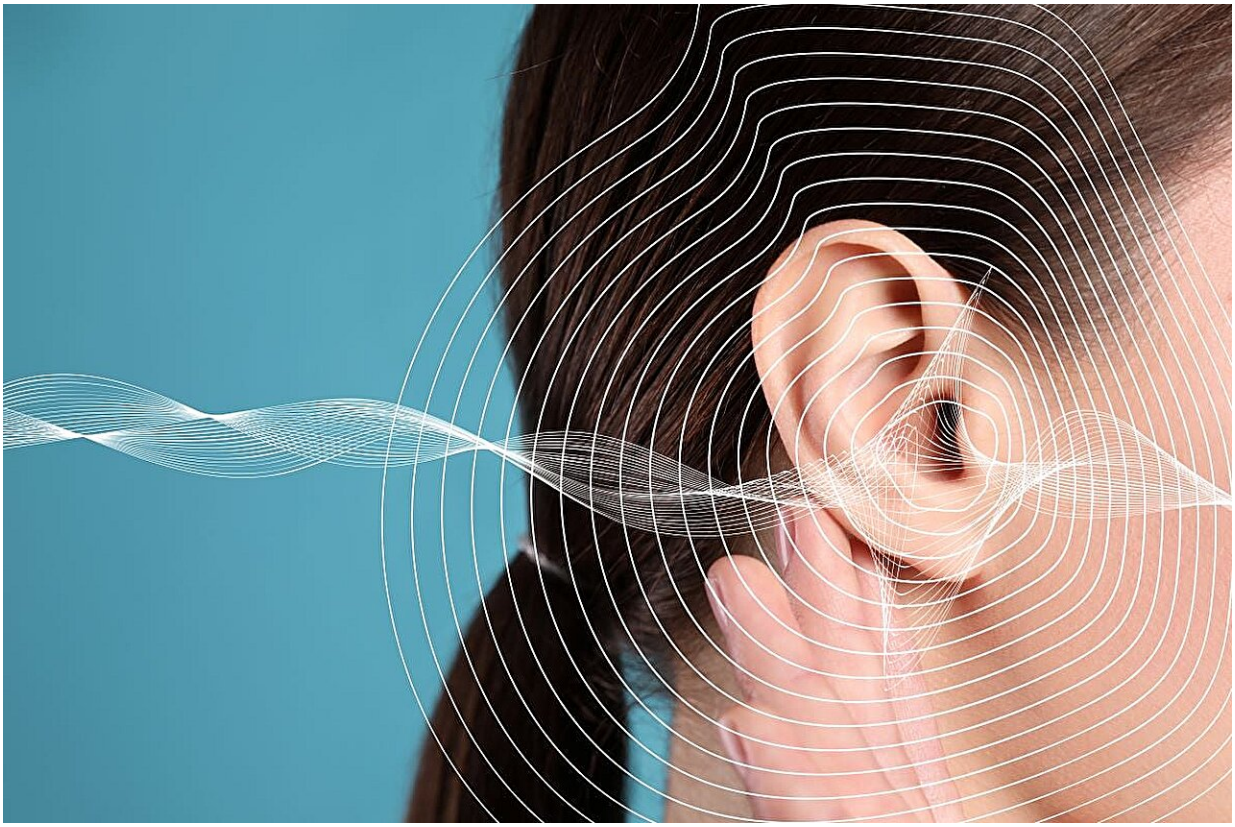

Sound stimulation of 75 dB at a frequency of 100 Hz leads to improvement in cervical vestibular-evoked myogenic potential (cVEMP) amplitude in patients with definitive Meniere disease, according to a

study published online June 24 in *Acta Oto-Laryngologica*.

Michihiko Sone, M.D., Ph.D., from the Nagoya University Graduate School of Medicine in Japan, and colleagues investigated the efficacy of sound stimulation of 100 Hz for treating vestibular dysfunction in patients with Meniere disease.

Analysis included patients with definitive Meniere disease with intractable vestibular symptoms and endolymphatic hydrops in the inner ear who received either sound stimulation of 75 dB at a frequency of 100 Hz for five minutes or sound stimulation of 75 dB at a frequency of 250 Hz for five minutes (control).

The researchers observed significant increases in cVEMP amplitudes after sound stimulation of 100 Hz in ears with vestibular endolymphatic hydrops. No such improvement was seen in the control group.

"Sound stimulation of 75 dB at a frequency of 100 Hz leads to improvement in cVEMP amplitude in patients with definitive Meniere disease," the authors write. "Adequate sound stimulation might be a new method for treating the vestibular dysfunction associated with Meniere disease."

More information: Michihiko Sone et al, Efficacy of 100 hz sound stimulation on saccular dysfunction in meniere's disease, *Acta Oto-Laryngologica* (2024). DOI: 10.1080/00016489.2024.2363462