

Dear Editor,

A couple of years ago, I published an Editorial in ITJ about Menière`s disease and Vestibular Migraine¹. A common genetic link was suggested for these two entities. The last issue of the Laryngoscope published a paper from Welfang et al.² that further enhances this hypothesis.

They selected 30 definite Menière`s Disease (MD) patients and 30 definite or probable Vestibular Migraine (VM) patients matched for age and sex.

Three dimensional real inversion recovery magnetic resonance (3D-real-IR) was performed 24 hours after intratympanic gadolinium in order to assess Endolymphatic Hydrops (EH).

Response rates, amplitudes, latency and responses thresholds of cervical and ocular evoked myogenic potentials (c/o VEMP) were tested using air conducted sound. Pure tone audiometry was used to evaluate the level of hearing loss.

Different degrees of EH were observed in the cochlea and vestibule of MD patients. Some VM patients had 3D-real-IR suspicious for cochlea EH and no EH were found in the vestibule in these patients. There was statistically significant correlation between EH and

low frequency sensorineural hearing loss. Response thresholds for c/o VEMP were no different in VM and MD patients.

Low frequencies sensorineural hearing loss correlated with EH in MD patients. 3D-real-IR showed more severe degrees of EH in MD patients compared to VM patients but suggestion of EH was present in the cochlea of VM patients. MD and VM patients behaved similarly in vestibular dysfunction and their transduction path.

These results are compatible with a common pathophysiology for both entities and suggest that VM-MD may indeed be two stages of the same process. This possibility should be tested by following up VM patients as time goes by using the described tests.

I think it is worth to publish these remarks in order to inspire new research in the future.

References

1. Oliveira CA. Editorial. Int Tinnitus J. 2015;19(2):2-3.
2. Welfang S, Guo P, Rent T, Wandg W. Magnetic resonance imaging of intratympanic gadolinium helps differentiate vestibular migraine from Menière`s disease. Laryngoscope. 2017;127:2382-8.

Best personal regards,

Professor Carlos A Oliveira, MD PhD