

Abstract EFAS/DGA 2007

How can we prove an endolymphatic hydrops?

Scholz, G.

Charité Berlin

e-mail: guenther.scholz@charite.de

Since the initial description of Ménière's disease (MD) in 1861 until now, it has been very difficult to make a clear diagnosis of MD. With the possibility of obtaining a reliable evidence of an endolymphatic hydrops (EH), this problem could be easier to resolve.

We have conducted a study to evaluate a new non-invasive and objective technique to detect an EH using the modulation of low-frequency biased DPOAEs (LFDP). Twenty patients suffering from unilateral MD were tested and the modulation index (MI) was compared with results in the control group, consisting of the subjects with normal hearing, matched for age and gender. The MI was significantly lower ($p < 0.05$) in subjects with MD. Electrocochleography (ECoG) is another, widely used technique to determine an EH. We have examined 50 adults with MD (stage 1+2, AAO-HNS) in a follow-up study in 2006, using the pure tone audiometry, impedancemetry, LFDP and ECoG. All tests were carried out the same day. The results were unexpected: In only 33 of 50 cases both ECoG and LFDP could be analysed. In only 12/33 cases pathological findings were confirmed by both methods. Considering ECoG alone, only 45 % of the patients had a positive finding corresponding to the course that disease usually takes.

Accordingly, it seems difficult to prove EH in all cases and it was concluded that an experienced doctor can make the best diagnosis of MD by a careful case history.

