Abstract, Prosper Meniere Society meeting 2020, Zell, Austria

**Endolymphatic sac pathologies and patient subgroups in Meniere’s disease**

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A recent postmortem pathology study on Meniere’s disease (MD) from the MEEI temporal bone collection, for the first time, systematically demonstrated epithelial pathology in the extraosseous portion of the endolymphatic sac (eES). The study demonstrated that eES pathology (i) was consistently present among the investigated MD cases, (ii) comprised two different histopathological types, i.e. *degenerative* (MD-dg type) or *developmental hypoplastic* (MD-hp type), and (iii) that both both types were associated with distinctly different clinical aspects of MD. Here, we investigated in a retrospective clinical study, whether patients with MD-dg and MD-hp type pathology in fact constitute distinct, clinically meaningful patient subgroups. Patients with definite MD (AAO-HNS, 1995; n = 72) were stratified using intravenous delayed gadolinium-enhanced inner ear magnetic resonance imaging and own established radiographic surrogate markers for both eES pathologies. Several phenotypic group differences were evidenced: The MD-dg group presented a higher average of vertigo attacks (ratio of vertigo patterns daily/weekly/other vs. monthly, MD-dg: 6.87 : 1; MD-hp: 1.43 : 1; p = 0.048) and more severely reduced vestibular function upon caloric testing (average caloric asymmetry ratio, MD-dg: 30.2 % ± 30.4 %; MD-hp: 13.5 % ± 15.2 %; p = 0.009). The MD-hp group presented a predominantly male sex ratio (MD-hp: 0.06:1 [f/m]; MD-dg: 1.2:1 [f/m]; p = 0.0004), higher frequencies of bilateral clinical affection (MD-hp: 29.4 %; MD-dg: 5.5 %; p = 0.015), a positive family history for hearing loss/vertigo/MD (MD-hp: 41.2 %; MD-dg: 15.7 %; p = 0.028), and radiographic signs of concomitant temporal bone abnormalities, i.e., semicircular canal dehiscence (MD-hp: 29.4 %; MD-dg: 3.6 %; p = 0.007). In conclusion, eES pathology-based “endotyping” may be a promising approach for further elucidating the etiologies of this clinical syndrome and may advance diagnosis, prognosis and clinical decision-making towards a more personalized approach in MD patient care.