

Introduction

Papers presented at 2005 Annual Meeting of the German Audiology & Neurotology Group (ADANO)

Arne Ernst

Department of Otolaryngology, Hospital of the University of Berlin, Charité Medical School, Berlin, Germany

The 2005 Annual Meeting of the German Audiology & Neurotology Group (ADANO), an integral part of the German Society of Otorhinolaryngology, Head & Neck Surgery was held in Berlin from September 29 – October 1, 2005. The meeting had a strong neurotological focus and the discussions were centered on the topics “*Postural Control Of Stance And Gait*” and “*Otolith Function In Physiology And Pathophysiology*”.

Berlin is a traditional strong research site in neurotology. *Hans SCHERER and Andy CLARKE* (Charité Medical School, Benjamin Franklin Campus, Vest. Res. Labs) designed the experiments for NASA/ESA space missions here at the Free University. They established otolith diagnostics for the normal ENT patient population and deduced from gravity and microgravity research how otolith disorders influence balance control. *Thomas LEMPERT* (Schlosspark-Klinik Berlin) is a neurologist who has worked extensively on BPPV and migrainous vertigo. Our group at UKB Hospital (*Dietmar BASTA, Arne ERNST*) has dealt extensively with VEMPs, posttraumatic vertigo and vestibular rehabilitation (including prosthetics).

This Special Issue provides an overview of neurotological research activities in Germany, Austria and Switzerland. In addition to the publications included in this issue, the following topics were presented:

Söllner (Cambridge) reviewed already published material on the evolution of otoliths from a genetic and molecular biological point of view and demonstrated that crystal growth is determined by genetics and gravi-

ty. *Wiener-Vacher (Paris)* provided a systematic review of the development of postural control and otolith disorders in children and outlined diagnostic procedures in this age group. *Straumann (Zurich)* reported on the clinical symptoms of central otolith disorders. *Bischoff (Zurich)* presented data on the prevention of falls by vitamin D supplementation in the elderly.

The papers included in this Special Issue have been peer-reviewed by the Journal of Vestibular Research. This review process has allowed the authors to update their presentations.

The papers fall into three mini-chapters. “Physiology of balance control: effects of aging” is represented by two papers. *Allum (Basel)* reports on the influence of age and height on trunk sway during stance and gait to identify elderly fallers. *Walther (Aachen)* reviews structural alterations in older persons with imbalance at the level of the vestibular sensory cells and otoconia. The second topic, “Methods of testing otolith function”, is represented by three papers. *Basta (Berlin)* describes the methodology of VEMP testing in analyzing saccular function. *Clarke (Berlin)* provides insights into ocular torsion response to active head-roll during spaceflight missions of four subjects (up to 400 days in the orbit!). He shows that the torsional VOR is not just an evolutionary relic from the past, but a highly organized response to gravitational stimuli. *Westhofen (Aachen)* reports on the otolith-ocular reflex in Meniere’s patients before and after surgery. Finally, “Recent advances in vestibular rehabilitation” is repre-

sented by three papers. *Danilov (Middleton)* examined the efficacy of electro-tactile stimulation of the tongue to substitute for vestibular loss. In a pilot study, subjects appear to show improved balance control following training with the device. *Loader (Vienna, Austria)* describes a visual training method called “optokinetic training” that can be used in older patients with imbalance to prevent falls. *Ernst (Berlin)* discusses an auditory feedback system for training patients with post-traumatic otolith disorders. Neurofeedback as a component of rehabilitation is an evolving concept, and this pilot study contributes to these world-wide efforts.

The organizers of the 2005 Annual Meeting of the German Audiology & Neurotology Group (ADANO) thank the editors of The Journal of Vestibular Research for accepting, promoting and continuously supporting our idea of a “German Special Issue” of the Journal.

We are grateful for the efforts of the reviewers, which led to an improvement in the manuscripts and helped us to provide the readers with what we hope is an interesting and valuable compilation of a memorable meeting (. . . with wonderful Big Band jazz in the evening hours. . .)!

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Arne Ernst