CORRESPONDENCE

The Treatment and Natural Course of Peripheral and Central Vertigo

by Prof. Dr. med. Michael Strupp, Prof. Dr. med. Marianne Dieterich, Prof. Dr. med. Dr. h.c. Thomas Brandt in volume 29-30/2013

Which Side Is Affected?

It seems to be the received wisdom that in case of a recurrence, patients should again perform their liberatory maneuvers, and the literature is full of instructions on this—but it does not state anywhere how a patient can identify the affected side, so that he or she knows which side to exercise. Here, in the countryside, a specialist in ear, nose, and throat medicine is not always easy to come by. Furthermore, patients are handed instructions (some of which apply to both sides) copied from websites, and one cannot always rely on the patient's recollection of whether their vertigo is exactly the same as the previous time, i.e. whether the maneuvers should be performed towards the same side as on that occasion.

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The author declares that no conflict of interest exists.

Cochrane Analysis on Betahistine Omitted

Vertigo presents a trans-disciplinary challenge and it is therefore understandable that the neurologists establishing guidelines also include Menière's disease, a disorder of the inner ear. Unfortunately, Menière's disease causes not only vertigo in affected persons but also uncertainty among treating physicians, since even the etiology of the disease is uncertain—except for the physical final stage.

It is perfectly understandable that the authors present their research into the subject. Even though it seems highly unlikely that a detected increase in circulation (in animal ears) can actually influence the course of Menière's disease (2). We fail to understand, however, why the Cochrane analysis on betahistine was not included in the certified CME article, whereas it was included in the report on reliably effective intratympanic gentamicin therapy. In the analysis it says that, although the drug is well liked by prescribers, a review of the seven studies accepted by the reviewers, which included a total of 243 patients, could not find evidence that betahistine works. It is stated in the review that most of the commissioned studies show favorable results, but are not valid (1).

The observational study cited by Strupp et al.—their own—has at best important limitations, like its follow-up study, which raises doubt as to what type of vertigo can be assessed regarding its course (3).

Even though the limited space of a reader's letter leaves little room for substantial discussion, the suggestion seems that betahistine influences patients' and treating physicians' hopes rather than the Menière's disease itself.

What is left out in this context is the fact that disappointed hopes constitute a serious adverse effect. We furthermore think it is tragic that betahistine in the meantime is prescribed far too often in cases where Menière's disease is only suspected.

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Postural Vertigo in Older Persons

Many thanks for the informative article on innovations in the area of vestibular types of vertigo.

I was merely baffled on reading "bilateral vestibulopathy … is the most frequent cause of motion-dependent postural vertigo in older patients." How, and when, should one diagnostically evaluate potential bilateral vestibulopathy in patients with pallhypesthesia, a total hip or knee endoprosthesis, visual impairments, and subcortical arteriosclerotic encephalopathy? At this

point I—and probably many other readers—would appreciate additional advice.

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Multiple Psychovegetative Symptoms

The article (1) is obviously a very thorough explanation of physical symptoms, or syndromes, of vertigo, which is based on a wealth of experience. Unfortunately, such vertigo by no means occurs in all affected patients, even in our specialized outpatient clinic, and hardly any attention is paid to the fact that isolated vertigo is very rare, since it is almost always embedded in a multitude of psychovegetative symptoms—a perspective from which vertigo is the lead symptom only for certain specialties: otolaryngology and neurology. The number of "vertigo patients" in non-specialized practices is high, as investigations have shown, so that the number of symptoms that cannot be captured with organic causes is correspondingly higher in such practices than in specialized outpatient clinics (2). But even in the mentioned publication, the rate of disorders that cannot be explained with organic causes is 35%, and if patients with Menière's disease are included, which is a non-controversial approach for doctors with a psychosomatic approach, then this rate rises to 45%.

What happens to such patients, who in a specialized outpatient clinic ultimately do not receive adequate help? Except for the administration of citalopram in "phobic vestibular vertigo," the authors do not share any therapeutic recommendations. Adequate psychological diagnostic evaluation is apparently also not undertaken. This should no longer be the case in these times with training opportunities for "basic psychosomatic care" and in view of the existence of specialists for psychosomatic medicine.

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In Reply:

Osterholz-Middendorf mentions a very relevant aspect in routine clinical practice: recurrences of benign paroxysmal positional vertigo (BPPV, which occurs in 50%) and the identification of the affected side by patients themselves. It is important to determine the side because the liberatory maneuvers for the right and left side mirror each another. The simplest measure seems to us that the patient performs steps 1 and 2 of the Semont maneuver for both sides. If this is correctly executed then the patient can determine the affected side in BPPV of the posterior semicircular canal as only lying down on this side will trigger vertigo. Afterwards the patients themselves can perform the liberatory maneuvers.

We thank Schaaf for his critical comments. The authors are aware of current studies of the treatment of Menière's disease with betahistine, gentamycin, or saccotomy. Meta-analyses for betahistine so far have, however, only included low daily doses. Observational studies and clinical experience in several thousands of Menière's patients worldwide have shown that a dose of 144 mg per day and long-term therapy of at least 12 months is effective in a minimum of 90% of patients, which means that the treatment we suggested is actually used in many European countries and in the United States.

The effectiveness of transtympanic gentamycin therapy has been confirmed (1). Because of the good therapeutic effects of betahistine and its good tolerability [intravenously, even plasma concentrations are tolerated that are 100 times higher (unpublished phase 1 study)], in the past four years no patient was treated with gentamicin in our outpatient clinic with 5000 patients per year; especially since the use of gentamycin is a destructive procedure that worsens the balancing function and can deteriorate patients' hearing, and cannot be used in patients with bilateral Menière's disease.

In conclusion: the recruitment for a placebo controlled multicenter study seeking to establish the correct dosages, which is funded by the Federal Ministry of Education and Research (*Bundesministerium für Bildung und Forschung*, BMBF), which is using 3 × 16 versus 3 × 48 mg betahistine/day (BEMED), was completed on 13 November 2012, with 221 patients; initial results are expected for mid-2014.

As a geriatrician, Rösler will certainly see many patients with chronic postural vertigo, a problem that will increase in relevance in the future. Bilateral vestibulopathy as a most important cause of a sensory deficit in older persons with postural vertigo is mostly underrated in terms of its importance and is often not even diagnosed. This is mainly caused by premature ageing of the function of the vestibular organs (2), similar to age-related hearing loss. The head impulse test and a caloric reflex test help make a diagnosis; in individual cases the function of the otolith organs will have to be examined by testing vestibular evoked myogenic potentials, as isolated deficits can occur (3). Other causes of sensory deficit, such as polyneuropathy

or impaired vision, are notably overrated. The same is true for subcortical vascular encephalopathy, orthopedic problems, or medications. The disorders mentioned earlier can be considered as causes only once vestibular disorders have been safely excluded.

Eichhorn in his letter mentions somatoform vertigo, a very important form of vertigo. This can be the primary pathology, without preceding or accompanying physical disorders, or a secondary pathology, as the result of a physical vertigo syndrome or in parallel to one, especially in chronic recurring forms such as vestibular migraine, Menière's disease, or vestibular paroxysmia. In order to do justice to such patients in terms of diagnostic categorization and therapy, we are collaborating clinically and scientifically closely with the psychosomatic clinic in Munich's university hospital Klinikum rechts der Isar (C Lahmann, P Henningsen) (4), as well as with Ms Eckhardt-Henn in Stuttgart, and we have established a special clinic. We agree with Eichhorn that pharmacotherapy alone is mostly not sufficient and often, psychotherapeutic or cognitive-behavioral therapeutic treatment is required. We do not, however, agree with the statement that Menière's disease is a psychosomatic disorder.

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