# Reactive psychogenic dizziness in Menière's disease

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#### Introduction

Besides recurrent hearing-loss and Tinnitus, attacks of labyrinthine vertigo are the predominant symptom of Menière's disease. With increasing duration of the disease patients often report some other, but very similarly experienced, form of "permanent dizziness" that cannot be explained sufficiently by organic events. Patients describe this as follows:

They feel dizzy, unsteady, shaky and confused; they have a pounding feeling and often a strong feeling of anxiety. Whole days are now experienced as "Menière's disease days". However, nystagmus, one typical sign for labyrinthine vertigo attacks, is absent.

These states of dizziness are mainly due to additional psychogenic components. Their origin might best be explained by behavioral mechanisms as therapy based upon behavioral principles is often helpful.

#### Patients and methods

In our neurootological and psychosomatic-oriented hospital we treated 96 Menière's disease inpatients for six to eight weeks between March 1994 and August 1997. The average age of the 47 women and 49 men was 53 years, ranging from 26 to 77 years of age. The average medical history was seven years, ranging from six months to 31 years.

We examined all patients neurootologically and psychologically. The neurootological part was based on the medical history, audiometers and vestibular tests; the psychological diagnosis on psychological interviews, including the personal history and psychological tests (FPI-R; SVF and Hamilton depressions scale). We also carefully proved the possibility of balance in motion, especially when patients were worried about dizziness and signs of nystagmus were absent.

### **Results**

- 41% (n= 39) of all patients were well compensated with sufficient coping abilities. They required treatment mainly for Tinnitus or hearing-loss.
- 59% (n= 57) predominantly showed different forms of "permanent" dizziness that could be mainly classified as reactive psychogenic dizziness.

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Reactive psychogenic dizziness coincides with

- 56% depressive symptoms
- 15% anxiety-related disorders
- 15% Neurasthenia
- 14% other psychological disorders.

46% (n= 44) of all patients showed psychological constellations of unreleased high psychodynamic tension before or at the time of the beginning of Menière's disease.

In a post-examination of 21 patients one to five years after treatment we found a statistically significant reduction of dizziness attacks from an average of four attacks per month before treatment, to an average of less than one attack per month, six months after treatment (p<.001).

#### **Discussion:**

Menière diseases goes along with vertigo and dizziness; but not every dizziness and vertigo is due to a labyrinthine event. Literature on psychogenic dizziness-components in Menière's disease is scarce and mainly occupied with presumptions concerning the relevance of psychogenic factors in the origin of Menière's disease's (2,3,4,5,6,7).

Our psychological investigation revealed signs of unreleased high psychodynamic tension before or coinciding with the beginning of Menière's disease for 46% of our patients. Thus, in these patients, the first Menière attack could be interpreted as a maladaptive solution of an explosive release of psychodynamic tension due to a patient's inability to express an existentially threatening event otherwise.

Undoubtedly and often Menière's vertigo attacks themselves had consequences for the psychogenic equilibrium of patients (6,8,9,10,11). Reactive psychogenic dizziness increased with duration of the disease, and the number of Menière's attacks. 59 % of our patients suffered mainly from reactive psychogenic dizziness. It occurred even more frequently when patients had insufficient knowledge of the organic event.

Real labyrinthine events did happen during the observed six to eight weeks. However, they were very seldom. We may conclude, that patients with Menière's disease usually suffer much less from labyrinthine vertigo attacks and more often and for a longer period of time from reactive psychogenic dizziness.

In spite of this, reactive psychogenic dizziness coinciding with Menière's disease is not mentioned in the revisited literature, even though this phenomena can be sufficiently explained and treated by applying behavioral principles.

Pawlow's dog learned to respond to a bell as a food-stimulus (12). During their labyrinthine vertigo attacks Menière's disease patients "learn" to respond to other stimuli through mechanisms of classical conditioning. Frequently observed responses are: insecurity, anxiety, panic and multiple attendant vegetative symptoms.

Table 1: The situation during the classical conditioning

These stimuli may be:

- the location of an attack
- a situation of conflict during an attack
- an increasing Tinnitus shortly before the attack
- a certain head-movement
- a particular time

Table 2: The result of classical conditioning and response generalization leading to reactive psychogenic dizziness.

Anxiety, as a reaction on vertigo attacks, may be experienced as a sensation of dizziness. This can easily lead to a viscous circle of anxiety-dizziness and dizziness-anxiety. We often observed psychogenic dizziness accompanied by clinically relevant symptoms of depression and anxiety.

It must be emphasized that these mechanisms operate subconsciously. So psychogenic dizziness can remain or establish itself even if the inner ear has already lost its function. This was true for four of our patients.

#### **Therapy**

We treated patients with intensive neurootological counseling, aiming to reach them on a cognitive as well as an emotional level. We offered precise information for the distressed patients within their individual capacities.

In cases of reactive psychogenic dizziness we treated every subconsciously learned connection inducing dizziness similar to the labyrinthine event psychotherapeutically, mainly by cognitive behavioral therapy.

To stabilize body-experiences we used "easy to follow" practical exercises, reducing psychological or organic effects by allowing new balance experiences. Here the exercises of Cawthorne (13) and Cooksey (14) have proved useful since about 50 years.

We also worked psychotherapeutically to improve coping abilities and reduce symptoms of depression and anxiety.

This therapeutical approach often reduces dizziness to the unavoidable dizziness of purely organic attacks. We observed the frequency of attacks and complaints lessening after six to eight weeks of psychosomatic in-patient treatment. In a post-examination of 21 patients one to five years after treatment we found a statistically significant reduction of dizziness according to the classification of the American Committee on Hearing and Equilibrium.

#### Conclusion

Psychogenic dizziness is an additional component in Menière's disease. It may be partially determined by labyrinthine events, but then can develop independently.

In many cases it can be treated successfully if the diagnosis is clear and adequate treatment is applied. Essential for therapy and prevention is good medical counseling. This should include helping patients to develop or enhance self-competence. Psychological treatment is necessary if psychogenic dizziness is the main reason for patients' suffering from Menière's disease.

For research purposes, differentiation between psychogenic dizziness and labyrinthine vertigo is important, e.g. to enable therapy evaluation.

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