

## **VERTIGO AS A PSYCHOGENIC DISORDER**

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Somatoform disorders play a causal or contributory role in a large portion of patients presenting with complex dizziness. In the course of their illness about 70% of these patients with complex somatoform dizziness still show symptoms and are more impaired in their professional and daily activities even after several years than patients with organic forms of dizziness. The most frequent underlying psychiatric disorders are anxiety and depressive as well as dissociative somatoform (ICD-10:F45) disorders.

Apparently somatoform dizziness first occurs without psychopathological symptoms. Most often this causes the patients to go to ENT specialists, neurologists, or internists. The patients describe experiencing frequent postural dizziness or a diffuse feeling of dizziness or rarely rotatory vertigo with accompanying vegetative symptoms and nausea. Depending on the underlying psychiatric illness, the following additional symptoms can be present: disorders of motivation and concentration, decline in performance, subjectively experienced restrictions in professional and daily activities, vegetative symptoms that accompany the dizziness, emotional and mood disorders, sleep disturbances, and symptoms of anxiety. Typically all of these symptoms are experienced and described reactively by the patients, i.e., as symptoms triggered and induced by the dizziness. Patients seldom report spontaneously conflict and stress situations that can function as triggers of vertigo and often are initially totally unaware of them. This makes it difficult to establish the diagnosis. The treatment depends on the clinical picture. Psychotherapy should be begun. Psychodynamic and also behavioral therapy are advisable; the choice depends on the clinical finding and the underlying conflict or stress situation. An ambulant therapy focused on the leading symptom can be quite successful in cases of short-term dizziness which is not very pronounced. Long-term techniques should be selected depending on the underlying conflict situation. For subjects with a strongly pronounced disorder and considerable suffering, we first recommend a combination therapy with a psychoactive drug; the drugs of choice are preparations belonging to the serotonin-reuptake inhibitors. The most important form of somatoform dizziness and the second most common form of vertigo is phobic postural vertigo.

Phobic postural vertigo: The cardinal symptoms and features of phobic postural vertigo include (1) the patients complain about postural dizziness and subjective postural and gait unsteadiness without this being visible to an observer; (2) dizziness is described as a numbness with varying degrees of unsteadiness of posture and gait, attack-like fear of falling without any real falls, in part also unintentional body swaying of short duration; (3) the attacks often occur in typical situations known to be external triggers of other phobic syndromes; (4) in the course of illness the patient begins to generalize the complaints and increasingly to avoid the triggering stimuli. During or shortly after the attacks (frequently mentioned only when asked) patients report anxiety and vegetative disturbances; most also report of attacks of vertigo without anxiety; (5) if asked, the patients frequently report that the complaints improve after imbibing a little alcohol and during sports; (6) frequently at the beginning there is an initially organic vestibular illness, e.g., resolved vestibular neuritis, benign paroxysmal positioning vertigo, or psychosocial stress situations; and (7) patients with phobic postural vertigo often exhibit obsessive-compulsive and perfectionistic personality traits and reactive-depressive symptoms.

*Clinical aspects and course of the illness.* The combination of postural vertigo with subjective instability of posture and gait in patients with normal neurological findings in vestibular and balance test results or disorders that cannot explain the complaints and a compulsive personality structure is characteristic. The monosymptomatic subjective disorder of balance is connected with standing or walking, manifests with attack-like worsening that occurs in the same patient with or without recognizable triggers and with or without accompanying anxiety. The absence of recognizable triggers or vertigo without accompanying anxiety causes many patients and the doctor treating them to doubt the diagnosis of a somatoform disorder.

Patients with phobic postural vertigo generally have a compulsive primary personality and a tendency to intensified introspection and the need "to keep everything under control." They are more likely to be ambitious and place high demands on themselves, and are often easily irritated and fearful.

Such patients practically never go to a psychiatrist first; they tend to go to the "specialist" for their symptom, especially as they feel themselves to be organically sick. Since phobic postural vertigo, however, is not yet part of the diagnostic repertoire of most neurologists and ENT doctors, the illness often lasts quite long before a diagnosis is established (mean 3 years). This frequently only occurs after a number of visits to different specialists, superfluous apparatus examinations, and erroneous classifications such as "cervicogenic vertigo" and "recurrent vertebrobasilar ischemia," and correspondingly unsuccessful treatment attempts. A psychiatric longitudinal study confirmed that phobic postural vertigo is a unique medical entity, which can be clearly differentiated from panic disorder with and without agoraphobia.

*Pathophysiology and therapeutic principles.* We have tried to explain the illusionary disorder of perception in postural vertigo and postural instability by hypothesizing that there is a disturbance of space constancy which results from a decoupling of the efference-copy signal for active head and body movements. Under normal conditions we do not perceive such slight, self-generated body sway or involuntary head movements during upright stance as accelerations. The environment also appears to be stationary during active movements, although there are shifts of retinal images caused by these relative movements. Space constancy seems to be maintained by the simultaneous occurrence of a voluntary impulse to initiate a movement and the delivery of adequate information in parallel to identify self-motion. According to von Holst and Mittelstaedt, this efference copy may provide a sensory pattern of expectation based on earlier experience, which by means of the movement-triggered actual sensory information is then so interpreted that self-motion can be differentiated from the motion of the environment. The sensation of vertigo described by phobic patients can be explained by a transient decoupling of efference and efference copy, leading to a mismatch between anticipated and actual motion.

Posturographic analyses show that these patients increase their postural sway during normal stance by co-contracting the flexor and extensor muscles of the foot, evidently an expression of an unnecessary fearful strategy for stance. Healthy subjects use this strategy only when in real danger of falling. During difficult balancing tasks, such as tandem stance with closed eyes, the posturographic data of the patients do not differ from those of the healthy subjects, i.e., the more difficult the demands of balance, all the more "healthy" is the balance performance of the patients with phobic postural vertigo.

*Pragmatic therapy.* The treatment is based on three or four measures: (1) thorough diagnosis, (2) "psychoeducational" explanation, (3) desensitization by self-exposure to triggers and regular exercise, and (4) if complaints persist, behavioral therapy with or without accompanying pharmacotherapy. The most important therapeutic measure is to relieve the patient of his fear of having an organic illness by carefully examining him and explaining the psychogenic mechanism. Subsequently desensitization by exposure to the causative situations should follow, i.e., the patients should not avoid such situations but, on the contrary, seek them out. At the same time, regular exercise has proven to be helpful in order to give the patient confidence in his/her own sense of balance. If these measures do not result in sufficient improvement after weeks to months, then behavioral therapy with or without drug therapy (with an SSRI) should be started. In two long-term follow-up studies it was demonstrated that more than 70% of the patients were free of symptoms or exhibited a clear improvement after receiving therapy. The readiness of most of the patients, who experience much stress due to their suffering, to understand the psychogenic mechanism and to overcome it by desensitization is a positive experience for both the attending physician and the patients.