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#### **Introductory Chapter**

#### Fayez Bahmad

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Dizziness and vertigo are symptoms related to peripheral vestibular disorders. These are among the most common complaints in medical offices, and knowledge of the major diseases affecting this system is of fundamental importance to the specialist in otolaryngology. In recent years, great advances have been made in otoneurology, which, coupled with increasing knowledge in the field of neurosciences, have substantially modified the approach of the patient with balance complaints. This book studies the most polemic of these vestibular diseases, the Meniere's disease.

Since 2009, the Bárány Society, an international society of otoneurology, has standardized the nomenclature of vestibular symptoms (SV) in four groups: one of the most important is the episodic vestibular syndrome: crises of vestibular symptoms interspersed with asymptomatic periods, such as Menière's syndrome and vestibular migraine [1].

Ménière's disease is an alteration of the inner ear characterized by two groups of symptoms: vestibular symptoms and auditory symptoms. Classical symptoms such as: fluctuating hearing loss, tinnitus, atrial fullness, and concomitant dizziness greatly aid the otorhinolaryngologist to diagnose carriers of the disease. But in many patients, their presentation may be different [1, 2].

The course of the disease may be progressive or nonprogressive, and in addition to the typical clinical presentation of Ménière's disease, two variants of the disease were identified:

- 1. Meniere's disease Cochlear—symptoms predominantly hearing.
- 2. Vestibular Ménière's disease—predominantly vestibular symptoms.

And in the literature can still be classified by some authors in two subgroups:

- 1. Ménière's syndrome symptoms of Ménière's disease caused by a known and well-established condition.
- **2.** Meniere's disease idiopathic cause.



In this book, we will adopt the term Ménière's disease to follow the prevailing trend among most research groups and discuss the main topics, current and past ideas about etiopathogenesis, diagnosis, and treatment of Ménière's disease and Ménière's disease associated with migraine.

It is likely that there are genotypic—racial, as well as phenotypic—environmental factors that influence the prevalence difference between countries. One of the major problems in this respect is that the initial presentation of the disease is often the cochlear form, which is not clinically recognized, and is again attributed to another specific cause or is presumed to be simply due to aging. Even after the vestibular component becomes obvious, long periods of re-mission may mask the complete final image of the syndrome with episodic vertigo, fluctuating autistic loss, tinnitus, and aural fullness. Therefore, generally in clinical practice only moderate to severe cases are tabulated in the estimates so far [1–3].

Some of the epidemiologically published studies to date have tended to blend different epidemiological concepts. The direction of these studies is mainly retrospective (the themes are identified after a result or illness), and they actually measure only prevalence (existing events or the number of cases of a disease at a given moment divided by the population at risk). Only prospective studies (subjects are identified before a result or illness, future events are counted) would have the power to adequately measure this incidence. Although more reflective of real life than an artificial experiment, retrospective observational studies are susceptible to bias [4].

Diagnostic failures: The multiplicity of diagnostic criteria is another problem that makes it difficult to establish the true incidence of Ménière's disease in the general population. In 1972, the Committee on Hearing and Equilibrium of the American Academy of Otorhinolaryngology (AAO-HNS) proposed a specific definition of the disease and guidelines for the evaluation of Ménière in communicating treatment results. In 1985, it was considered that the definition of Ménière's disease needed to be restricted to cases with a complete set of classic signs and symptoms. The 1995 criteria were intended to simplify the definition of Ménière's disease and allow greater flexibility, making it usable in a wide range of studies and classifications. A minimum set of signs and symptoms must be filled in such a way that the degree of certainty of the diagnosis can be established [4].

Etiopathogeny: Currently, there is no universally accepted theory about the pathophysiology of do-ence. Through histopathological studies, it is presumed that endolymphatic hydrops is the most descriptive pathological characteristic of Ménière's disease. The pathophysiology of the symptoms is still disputed: ruptures of membranes, increased pressure and mechanical displacement of the peripheral organs as saccule by endolymph accumulation, viral infections, and autoimmune disease in addition to several other theories that have already been reported. It can be seen that in this scheme currently accepted endolymphatic hydrops is no longer a central etiology but rather as one of the manifestations of the syndrome. And the exact mechanism of the etiopathogenesis of the syndrome remains unknown. It is believed that a multifactorial inheritance is the best response, in which the necessary conditions are met to lead to mal absorption of the endolymph and, subsequently, to dropsy. Clinical and laboratory evidence supports this concept [1–4].

#### **Author details**

Fayez Bahmad

Address all correspondence to: fayezbjr@gmail.com

- 1 Health Science Faculty of the University of Brasilia, Brasilia, Brazil
- 2 The Brasiliense Institute of Otolaryngology, Brasilia, Brazil

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