



Preface

Pathogenesis of Meniere's disease:
treatment considerations



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Guest Editor

This publication was designed, unlike any other of which I am aware hitherto, to emphasize the pathogenesis of Meniere's disease relating to its diagnosis and treatment. Pathogenesis herein is defined as an etiologic or etiologic factor that leads to processes or mechanisms that result in pathologic conditions, which when associated with the dreadful symptoms of Meniere's disease, require the patient to seek consultation with his or her otologist or otolaryngologist. The term *idiopathic endolymphatic hydrops*, as used in the past, is a negative, defeatist term that is disclaimed. There is much that is known, and this optimistic approach will aid in the understanding of the pathogenesis and treatment of the patient with Meniere's disease, as discussed in this publication.

I cannot be more grateful and appreciative of the timely and valued contributions by the authors of these various articles. Their contributions were excellent, and I thank them all. While disavowing favoritism, I do specifically acknowledge the primary academic studies (genetic and molecular biologic) of Dr. Andrew Morrison. It should be mentioned that he also has a vast experience in successfully treating many hundreds of patients with endolymphatic sac surgery, which is apparent in his many publications.

These articles describe the natural history of Meniere's disease and methods of diagnosis and treatment. The history remains the most important part of the diagnostic process. Medical management (empiric) is discussed; this is sufficient to control symptoms in the majority of patients with

Meniere's disease. Surgery is reserved for those patients with intractable progressive Meniere's disease who fail medical therapy. Options include conservative surgery or destructive surgery. Destructive surgery includes vestibular nerve section and physical or chemical labyrinthectomy, the latter of which has witnessed many recent publications. Conservative surgery includes particularly endolymphatic sac surgery that has stood the test of time for 75 years.

Endolymphatic sac enhancement appears to reverse the pathogenetic mechanisms and has restored normal lives to thousands of patients as described in these articles. The contribution by Dr. Huang is noted in this regard. Experimental perfusion of the round window (or for that matter, perfusion through the endolymphatic sac) with therapeutic agents (eg, steroids, and not ototoxic agents) may become, it is hoped, efficacious in the future. For now, however, endolymphatic sac surgery remains the only procedure that has the potential to affect the pathogenesis of Meniere's disease. More research and more understanding of this disease remain to be established.

In conclusion, the following studies, the etiologic basis of Meniere's disease appears to be multifactorial inheritance. The pathogenesis appears to be malabsorption of endolymph. Certainly, the most important pathologic correlate is endolymphatic hydrops with occasional rupture in approximately one third of patients. The pathophysiologic symptoms appear to be explained on the basis of physical and chemical properties.

Dedication and respect to two giant pioneers of otology and neurotology

It is my honor to dedicate this issue of the *Otolaryngologic Clinics of North America* to the two most important pioneers of otology and neurotology of my lifetime. Harold F. Schuknecht was my mentor, friend, and colleague. I was fortunate to have him as my mentor when I served as medical resident and staff member from 1958 to 1961 at Henry Ford Hospital. I performed my first stapedectomy with him in July of 1958. I later joined him on the medical faculty at Harvard University and the Massachusetts Eye and Ear Infirmary in 1963. Schuknecht—friend, mentor, and colleague to me and to all of us—represents in my opinion the very best combination of productivity in the realm of otologic research, expertise in clinical innovative practice, and education of hundreds of specialists, including many professors and chairmen. His contributions to the study of Meniere's disease are vast, as documented in his opus *Pathology of the Ear* and in many publications discussing the pathology of this disease. In addition, he has promulgated transtympanic labyrinthectomy as well as systemic and transtympanic use of ototoxic drugs as a method of treating patients with severe Meniere's disease.

Another person who stands tall as a pioneer in the area of Meniere's disease and in many other aspects of otology is, of course, Dr. William House.

I also count Bill House as a friend, colleague, and indeed teacher, as we have all learned from his many publications and contributions over the years. He is a pioneer of the relatively newfound field of neuro-otology. He certainly pioneered the development of skull-base surgery in the field related to temporal bone surgery. He was the first to develop an otological combined with a neurosurgical approach to deal with vestibular Schwannomas. He pioneered the use of cochlear implantation, which was developed and is now in use throughout the United States and the world. Among his many contributions is his popularization of endolymphatic sac surgery around 1960. In addition to his many contributions, he has given thought to the underlying pathogenesis of Meniere's disease.

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