MÉNIÈRE’S DISEASE AND ITS SURGICAL TREATMENT
REPORT OF 300 CASES*

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Olivecrona17,18 in 1943 described all cases of Ménière’s disease observed in the Neurosurgical Clinic of Serafimerlasaretet from 1930 to December 31, 1942, a total of 160 cases. This paper is a continuation of the previous work, including all cases observed up to December 31, 1949. The total has now increased to 300, averaging 20 cases a year. Of these patients, 254 were operated upon. This represents 2.5 per cent of all surgical operations performed at this Clinic.

Ménière’s disease is a symptom-complex characterized by sudden attacks of vertigo usually accompanied by nausea and vomiting, unilateral reduction of hearing, and tinnitus. The cause is probably irritation of the acoustic nerve. The exact localization of an abnormal stimulus is not yet known but the most likely situation is in the terminal receptors. A similar symptom-complex may be caused by any space-occupying lesion around the eighth nerve; in such a case we prefer to call it Ménière’s syndrome. Frequency and duration of attacks are very variable, a peculiarity of the disease being long periods of remission. Examination almost always reveals defect of the acoustic nerve, more marked in the cochlear than in the vestibular branch.

The space-occupying lesions that may cause a Ménière’s syndrome are acoustic neurinomas, other cerebellopontine angle tumors, and aneurysms of the vertebral artery or, less frequently, of the posterior choroidal artery. These lesions, however, simulate Ménière’s disease only at their onset, because during the course of the disease other symptoms develop, such as of a lesion of other cranial nerves and often of the cerebellum, while in Ménière’s disease only the acoustic nerve is affected. Only in cases of vertebral aneurysm may Ménière’s syndrome be simulated for a long time (Olivecrona). Processes affecting the ear (otitis media with extensive perforation of the tympanum, otosclerosis) may also exhibit symptoms of Ménière’s syndrome.

Sex and Age. The disease is more common in men. Of our patients, 186 were men and 114 women. The onset is usually between the ages of 31 and 55 years; 211 of our cases (70 per cent) came within this group. The youngest patient was 13 years of age, the oldest 72. The age distribution appears in Fig. 1.

Laterality. In 147 patients the disease was on the right side, and in 142 on the left. In 11 patients it was difficult to determine the affected side.

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Occasionally a bilateral acoustic examination revealed no abnormalities, so that if the patient did not have a definite unilateral tinnitus it was impossible to determine the side of the disease. Bilateral Ménière’s disease does occur, and was found in 7 of our patients (2.3 per cent). Dandy\textsuperscript{4,5} found a rather higher percentage (10 per cent).

\textit{Predisposing Factors.} (a) \textit{Trauma.} Previous trauma was ascertained in 37 of our patients. Dandy\textsuperscript{5} considered trauma of no importance. This has not been our experience. In the majority of cases trauma is important only because it calls attention to a pre-existing process, but some of our cases present interesting considerations. In 1 patient (No. 60, History: 233.38) unilateral tinnitus and deafness developed immediately after a cranial trauma. Ten years later he had typical attacks of Ménière’s syndrome. Operation revealed an arachnoiditis of the cerebellopontine angle, bridling the nerves and vessels (a branch of the anterior inferior cerebellar artery was very adherent to the eighth nerve).

(b) \textit{Otitis.} Ear infections affecting only the diseased side, or both sides, occurred in 26 instances. In several of our cases an earlier otitis media, particularly if accompanied by a defect of the tympanum, without doubt played an important role. One patient (No. 17, History: 2732.35) had bilateral otitis media with extensive perforation of the tympana. Examination of the vestibular function was impossible because even gentle blowing into the external ear, especially on the right side, caused nausea and typical dizziness. The right side was most affected and section of the right vestibular branch was performed. Several years later, however, the patient again had attacks of dizziness, probably due to irritation of the left acoustic nerve. This case was diagnosed as bilateral Ménière’s disease.

\textit{Blood Pressure.} A rise in blood pressure is often considered to be the cause of dizziness. The average blood pressure in 270 patients was systolic 138, and diastolic 82, corresponding almost to that found by Crowe\textsuperscript{3} in 68 patients, systolic 137, and diastolic 83. Only in a few instances did the pressure rise to nearly 200. We therefore do not consider that blood pressure plays any important role.

\textit{Symptomatology.} As stated previously, Ménière’s disease is characterized