CHAPTER 2

Ménière’s Disease with Bilateral Fluctuant Hearing Loss

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Although bilateral involvement of Ménière’s disease can produce deafness in both ears, actually little attention had been directed to this involvement. In 1959, Jongkees[1] reported the high incidence involving the second ear in order to warn of a dangerous trend toward using destructive procedures in the treatment of this disease at that time. Since then, several reports concerning the bilateral aspects of this disease have appeared [2–8]. However, the lack of mutually agreeable diagnostic criteria for making these reports and the differences in Ménière’s disease characteristics of patients among institutes makes it difficult to establish definitive interpretations. In 1988, the Vestibular Disorder Research Committee made a survey among 15 committee member institutes using the same diagnostic criteria of bilateral involvement of Ménière’s disease. Based on the results obtained, the incidence and characteristics of bilateral involvement in Ménière’s disease will be discussed in this chapter.

Methods and Materials

The diagnostic criteria of Ménière’s disease and Ménière’s disease with bilateral fluctuant hearing loss are shown in Chap. 1 (Tables 1.1, 1.2). In this study, unilateral Ménière’s disease refers to the condition in which the cochlear symptom is limited to one ear. The study is based on 480 cases of Ménière’s disease from 15 committee member institutes between April 1, 1988 and September 30, 1988. A total of 201 cases (91 male, 110 female) showed normal hearing in the second ear (unilateral Ménière’s disease or cases with unilateral involvement). In 135 cases (58 male, 77 female), fluctuant cochlear symptoms in the second ear were present (Ménière’s disease with bilateral fluctuant hearing loss or bilateral involvement). Another 10 cases (3 male, 7 female) showed progressive hearing loss in the second ear (Ménière’s disease with progressive sensorineural hearing loss). The types of hearing loss in the second ear of the remaining 134 cases were not clear.

The following items were checked for each of the Ménière’s disease patients:

1. Level of hearing in both ears
2. Types of hearing in the second ear—fluctuant sensorineural hearing loss, fluctuant tinnitus, progressive sensorineural hearing loss, other types of sensorineural hearing loss, and others
3. Disturbance of equilibrium function—positive Romberg or ataxic gait, positive spontaneous nystagmus or positional nystagmus, and an abnormal caloric test
4. Course of the disease—duration of disease, number of attacks since the disease began, regular recurrence, irregular recurrence, cluster attacks, sporadic attacks, evolvement of attacks from vertigo to continuous dizziness, and physicians’ judgments on the general course of the disease (improvement, fluctuation, fixation, or worsening)
5. Physician’s evaluation—if an intractable type, why?

Results

The average age at the onset of unilateral Ménière’s disease was shown to be 42.1 years and that of Ménière’s disease with bilateral fluctuant hearing loss, 46.2 years (Fig. 2.1). Figure 2.2 shows duration of the disease from the time of onset of initial

![Fig. 2.1. Distribution of age (years) at onset of Ménière’s disease. white column, unilateral involvement; black column, bilateral involvement](image1)

![Fig. 2.2. Distribution of duration of Ménière’s disease. white column, unilateral involvement; black column, bilateral involvement](image2)