

## **Evaluation of epidemiological and demographic features of meniere's disease in Patients with definite diagnosis of Meniere's disease referred to Alavi hospital of Ardabil from March 2021 to March 2022**

### **Abstract**

**Background:** Meniere's disease refers to the increase of endolymphatic fluid and as a result the expansion of the endolymphatic sac of the inner ear. Since the advent of diagnostic tools such as MRI, due to the possibility of seeing endolymphatic hydrops in the images and other methods such as videonystagmography, it can be said that the diagnosis of Meniere's disease is no longer just by ruling out other causes and it is possible to diagnose the patient directly with New tools approved.

**Aim:** In this study, after the diagnosis of Meniere's disease was confirmed, we reviewed the information related to the demographic characteristics and clinical manifestations of the patients.

**Materials and methods:** Patients referred to the neurology clinic of Alavi Hospital in Ardabil, in case of a definite diagnosis of Meniere's disease by a neurologist, were included in the study with clinical and paraclinical examinations. These patients completed a questionnaire including demographic questions, clinical symptoms and disease course. After collecting the patients' information, it was entered into the statistical software to be analyzed and the demographic distribution, clinical symptoms and course of Meniere's patients were included in the final report.

**Results:** 45 cases of Meniere's disease diagnosed with imaging methods were studied. 26 cases were male (57.8 percent) and the gender ratio (male to female) was 1.37. The average age of the participants in the study was  $35.73 \pm 5.98$  and the lowest and highest ages were reported as 22 and 51 years. In terms of occupation, 4 cases (8.9%) were unemployed, 7 cases (15.6%) were housewives, and the rest of the patients were employed. 38 cases (84.4%) mentioned their place of residence in the city. All the patients reported the medical history of their disease and 9 cases (20%) of them mentioned the family history of the disease. Anxiety and depression were reported in 17 and 10 patients respectively, and hypertension was present in only 8 cases (17.8%). Also, there was a history of chronic otitis media, allergy, and trauma in 1 case (2.2 percent), 7 cases (15.6 percent), and 12 cases (26.7 percent), respectively. The most common symptoms of patients after Dizziness attacks (in 100% of patients), respectively: imbalance in 39 cases (86.7%), tinnitus and ear fullness in 32 cases (71.1%), nausea/vomiting in 23 cases (51.1%), Positional vertigo and bilateral pressing headache were 9 cases each (20%). Recruitment was reported in 8 patients (17.8 percent) and 4 patients (8.9 percent) witnessed a period of loss of consciousness related to a vertigo attack. 44 patients (97.8%) had unilateral disease. In 27 cases (60 percent), there was no difference in the condition of the patients over time, in 16 cases (35.6 percent), the condition of the patients improved, and in 2 patients (4.4 percent), the course of the disease worsened.

**Conclusion:** Meniere's disease most likely affects men with an average age of 35 years, and patients have a history of anxiety, and vertigo attacks and hearing loss with involvement of one ear are symptoms of the disease.

**Key words:** endolymph, electrocochleography test, Meniere's