

Meniere's Disease

Author: Geoff Willard, PT, DPT, NCS, CSRS

Fact Sheet

Overview and Etiology

Meniere's Disease (MD) is a condition characterized by intermittent vertigo episodes lasting longer than 20 minutes, tinnitus, aural fullness, and low-frequency hearing loss.¹ These "attacks" are typically accompanied by periods of remission that may last months to years. The etiology of MD is not fully understood, but has been correlated with increased inner ear fluid volumes known as endolymphatic hydrops (ELH).²

Diagnosis

As described above, reported symptoms may be present intermittently for years, making acute diagnosis challenging. Accuracy of diagnosis will likely be greater over a longer course of time. However, certain characteristics may assist in the diagnostic process.

Diagnosis is made clinically, based on the Barany Society Criteria below.¹ Recommended diagnostic testing should include an Audiogram to observe for low to medium frequency sensorineural hearing loss.² Additional follow-up testing may include MRI of the internal auditory canal and posterior fossa. Vestibular Migraine (VM) should be considered as an alternative or overlapping diagnosis, and the individuals should be assessed regarding whether they meet the VM diagnostic criteria.^{2,3,4} Vestibular Function Testing is of limited clinical value, particularly in early stages.²

Diagnostic Criteria proposed by the Barany Society¹ for Definite and Probable Meniere's Disease are as follows:

- Definite Meniere's Disease
 - Two or more spontaneous episodes of vertigo each lasting 20 min to 12 hours
 - Fluctuating aural symptoms (hearing loss, tinnitus, or fullness) in the affected ear
 - Not better accounted for by another vestibular diagnosis
 - **Audiometrically documented low to med frequency sensorineural hearing loss in the affected ear on at least one occasion**
- Probable Meniere's Disease
 - At least two episodes of vertigo each lasting 20 min to 24 hours
 - Fluctuating aural symptoms (hearing loss, tinnitus, or fullness) in the affected ear
 - Not better accounted for by another vestibular diagnosis

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Contact us:

ANPT

Phone: 952.646.2038

info@neuropt.org

www.neuropt.org

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Treatment Strategies

Treatment for MD is often aimed at reducing the severity and frequency of vertigo attacks, as well as improving balance and quality of life.

Treatment options in early stages consist of education and lifestyle modification, such as reducing salt and caffeine intake, stress management and proper sleep hygiene. Medical management at this stage may involve use of diuretics to reduce fluid retention. Vestibular Rehabilitation (VR) is not typically effective at this stage in managing acute symptoms of vertigo, as the attacks are episodic and often unpredictable.² However, VR can be effective at improving functional balance and reducing falls risk.²

If the condition is not controlled adequately with conservative measures, discussions may be held regarding more definitive management strategies.⁵ These options include intratympanic steroids, endolymphatic sac surgery, intratympanic gentamicin injections and vestibular nerve sections.⁵ These treatments are inherently more invasive, but each has potential to improve quality of life in individuals with Meniere's Disease. Individuals receiving such treatment will likely have resultant unilateral vestibular weakness and hearing loss. As a result, they should be referred for vestibular rehabilitation and audiology to improve function of balance and hearing, respectively, as well as symptomatic vertigo reduction.²

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References:

1. Lopez-Escamez JA, Carey J, Chung W, et al. Diagnostic Criteria for Meniere's Disease. *Journal of Vestibular Research*. 2015; 25:1-7.
2. Basura GJ, Adams ME, Monfared A, et al. Clinical Practice Guideline: Ménière's Disease. *Otolaryngology–Head and Neck Surgery*. 2020;162(2):S1-S55.
3. Rauch SD. Clinical hints and precipitating factors in patients suffering from Meniere's disease. *Otolaryngol Clin North Am*. 2010;43(5):1011–7
4. Lempert T, Olesen J, Furman J, et al. Vestibular Migraine: Diagnostic Criteria. *Journal of Vestibular Research*. 2012; 22; 167-172.
5. Sharon JD, Trevino C, Schubert MC, et al. Treatment of Menière's Disease. *Curr Treat Options Neurol*. 2015; 17(14).