

Vestibular Migraine

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FACT SHEET



Vestibular Rehabilitation
Special Interest Group



Vestibular migraine is a disorder in which people with migraine headaches develop vestibular symptoms¹. Dizziness, vertigo, nausea, and imbalance can occur at the same time or between headache episodes. In fact, symptoms of dizziness and vertigo are reported more frequently in people who have migraines than in those who do not have migraines². It is estimated that 10% of people seeking treatment for either dizziness or migraine can be diagnosed as having vestibular migraine². Patients with certain types of migraines (for example, basilar-type migraine) commonly describe vertigo as a symptom³.

Vestibular migraine was recognized as a distinct diagnosis in 2012 by the International Headache Society¹. Prior to this time, other terms were used to describe vestibular migraine, such as “benign recurrent vertigo,” “migraine-related vestibulopathy,” or “migraine-associated dizziness.”

What Are Symptoms of Vestibular Migraine?

The diagnosis of vestibular migraine is based on repeated attacks of vestibular symptoms, such as dizziness, imbalance, nausea, or vertigo, and a history of migraine^{3,1,4}. Patients have also described feelings of lightheadedness, head swimming, rocking, or motion sickness. These symptoms can be provoked by head motion or busy, moving environments, and may give a feeling of spatial disorientation. Some patients also have hearing changes, ear pressure, or ringing. The symptoms are usually moderate to severe and may last minutes to several days. Most often the symptoms occur at the same time as a migraine headache. The headache is typically one-sided, pulsing in nature, and is accompanied by discomfort with light (photophobia), sound (phonophobia), or a visual aura.

But symptoms can be variable, and some patients never have headache at the same time as their vestibular symptoms⁵. Because the symptoms of vestibular migraine can be the same as other vestibular problems, careful examination must exclude other diagnoses before vestibular migraine is diagnosed. During the times that no symptoms are experienced, vestibular testing is often normal².



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Who Gets Vestibular Migraine?

Women are affected five times more than men and may experience symptoms with the menstrual cycle³. Migraine headaches must have occurred prior to the first episode of dizziness. Usually the first symptoms will begin between the ages of 30 to 50 years. There also is a link between Meniere's disease and vestibular migraine, and patients with either diagnosis are more likely to have the other.

Anxiety is another disorder that occurs frequently with vestibular migraine, and patients with anxiety often respond to treatment of anxiety along with migraine management. Whether vestibular migraine has genetic links is uncertain, but symptoms can run in families. The reason why vestibular migraines happen is uncertain, and research is actively in progress to determine the cause. One theory suggests an imbalance in the way that the brain processes information about sensation, pain, and vestibular information⁶.

How is Vestibular Migraine Treated?

Physical therapy for vestibular rehabilitation has been shown to be effective in reducing symptoms and improving use of the vestibular system for balance and mobility^{7,8}. People with vestibular migraine may require longer treatment than those without migraine to achieve improvement, and symptoms may not completely resolve. This research suggests that people with vestibular migraine respond better to supportive treatment that also addresses related problems, such as anxiety⁹.

Preventing and controlling the migraines with medication has been shown to significantly help people with vestibular migraine. A wide variety of medications are used in migraine prevention. In studies examining the different medications, no one medicine was shown to be more effective than others^{10,11}.

More traditional treatment of migraine, such as identifying and avoiding diet triggers, has been found to be helpful¹¹. Common food triggers are caffeine, chocolate, cheese, wine, and foods with MSG. Exercise and improving sleep habits are also recommended.

References

- Lempert T, Olesen J, Furman J, et al. Vestibular migraine: diagnostic criteria. *J Vestib Res*. 2012;22(4):167–72. doi:10.3233/VES-2012-0453.
- Lempert T, Neuhauser H. Epidemiology of vertigo, migraine and vestibular migraine. *J Neurol*. 2009;256(3):333–8. doi:10.1007/s00415-009-0149-2.
- Furman JM, Balaban CD. Vestibular migraine. *Ann N Y Acad Sci*. 2015;1343(1):90–96. doi:10.1111/nyas.12645.
- Cohen JM, Escasena CA. Headache and Dizziness: How to Differentiate Vestibular Migraine from Other Conditions. *Curr Pain Headache Rep*. 2015;19(7):502. doi:10.1007/s11916-015-0502-3.
- Cha Y-H, Lee H, Santell LS, Baloh RW. Association of benign recurrent vertigo and migraine in 208 patients. *Cephalgia*. 2009;29(5):550–5. doi:10.1111/j.1468-2982.2008.01770.x.
- Espinosa-Sanchez JM, Lopez-Escamez JA. New insights into pathophysiology of vestibular migraine. *Front Neurol*. 2015;6:12. doi:10.3389/fneur.2015.00012.
- Vitkovic J, Winoto A, Rance G, Dowell R, Paine M. Vestibular rehabilitation outcomes in patients with and without vestibular migraine. *J Neurol*. 2013;260(12):3039–48. doi:10.1007/s00415-013-7116-7.
- Wrisley DM, Whitney SL, Furman JM. Vestibular rehabilitation outcomes in patients with a history of migraine. *Otol Neurotol*. 2002;23(4):483–7. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/12170150>. Accessed August 18, 2015.
- Honaker JA, Gilbert JM, Shepard NT, Blum DJ, Staab JP. Adverse effects of health anxiety on management of a patient with benign paroxysmal positional vertigo, vestibular migraine and chronic subjective dizziness. *Am J Otolaryngol*. 34(5):592–5. doi:10.1016/j.amjoto.2013.02.002.
- Maldonado Fernández M, Birdi JS, Irving GJ, Murdin L, Kivekäs I, Strupp M. Pharmacological agents for the prevention of vestibular migraine. *Cochrane database Syst Rev*. 2015;6:CD010600. doi:10.1002/14651858.CD010600.pub2.
- Bisdorff AR. Management of vestibular migraine. *Ther Adv Neurol Disord*. 2011;4(3):183–91. doi:10.1177/1756285611401647.