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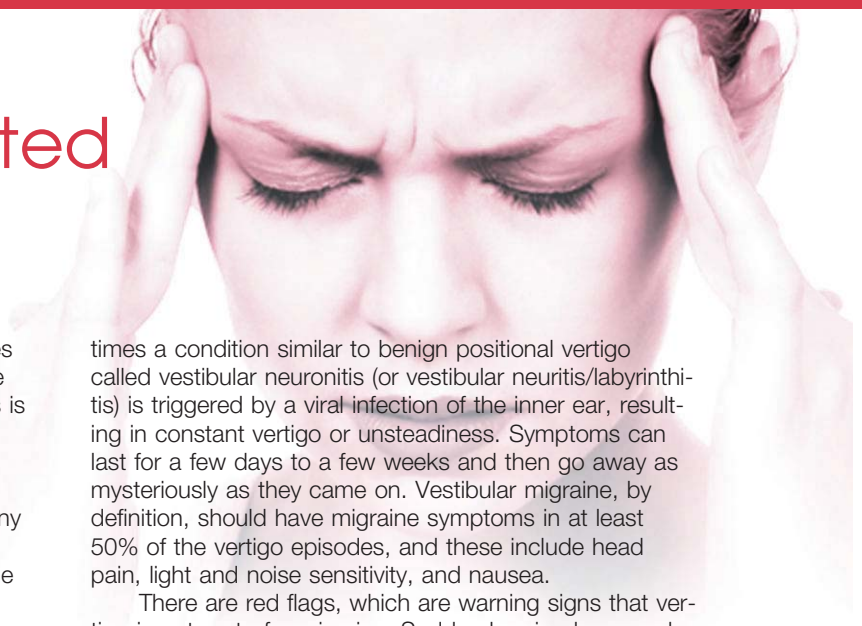
# Headache Toolbox



## Migraine Associated Vertigo

Between 30 and 50% of migraineurs will sometimes experience dizziness, a sense of spinning, or feeling like their balance is off in the midst of their headaches. This is now termed vestibular migraine, but is also called migraine associated vertigo. Sometimes migraineurs experience these symptoms before the headache, but they can occur during the headache, or even without any head pain. In children, vertigo may be a precursor to migraines developing in the teens or adulthood. Migraine associated vertigo may be more common in those with motion sickness.

For some patients this vertiginous sensation resembles migraine aura, which is a reversible, relatively short-lived neurologic symptom associated with their migraines. Most often an aura is visual, but it can also come in the form of altered sensation or problems with speech or language. Aura typically lasts 5-60 minutes, is followed by migraine pain, and is usually only diagnosed in someone with a known migraine history. The vertigo associated with migraine can be shorter than a typical aura or last longer, from a few minutes to 3 days. With vertiginous migraine, the symptoms can occur before, during, or after the onset of head pain.

The vertigo symptoms vary widely in those with migraine. The sensation can occur without any outside trigger, and can be experienced either as a feeling of the self-moving, or as if the surroundings are moving. Other times, vertigo symptoms may be triggered by a change in head position or ongoing movement of the head. Sometimes just looking at an object that is actually moving will trigger an attack.

About 1% of the general population has migraine associated vertigo, but the diagnosis can be confusing, as it may resemble, or actually be another disorder happening coincidentally in a migraineur. It has been estimated that migraineurs are more likely to have benign positional vertigo, a common disorder that may be twice as common in migraineurs as the general population, but is not associated with head pain. In benign positional vertigo, the room spins with changes in position, particularly when going from a lying to a sitting or standing position. Even rolling over in bed can cause the sensation. Sometimes a condition similar to benign positional vertigo called vestibular neuronitis (or vestibular neuritis/labyrinthitis) is triggered by a viral infection of the inner ear, resulting in constant vertigo or unsteadiness. Symptoms can last for a few days to a few weeks and then go away as mysteriously as they came on. Vestibular migraine, by definition, should have migraine symptoms in at least 50% of the vertigo episodes, and these include head pain, light and noise sensitivity, and nausea.

There are red flags, which are warning signs that vertigo is not part of a migraine. Sudden hearing loss can be the sign of an infection that needs treatment. Loss of balance alone, or accompanied by weakness can be the sign of a stroke, particularly in those known to have a risk for vascular disease. In Meniere's disease, there can be a progressive or intermittent hearing loss, sense of ear fullness, and ringing or buzzing in the ear, can also be a cause of vertigo. Vertigo that is worsening or accompanied by nonmigraine symptoms, such as weakness or change in hearing, merits further evaluation as many nonmigraine disorders can also have similar symptoms.

Vestibular migraine frequently responds to standard migraine prevention and attack treatment strategies. Use of magnesium, blood pressure medications, particularly beta blockers, antiseizure medications such as topiramate and in particular, antidepressants (tricyclic or serotonin norepinephrine reuptake inhibitors) may reduce the number of attacks, although good scientific trials for determining effectiveness are not available. There is some evidence that a multidisciplinary approach combining physical exercise, vestibular physical therapy, medications, and lifestyle changes may be effective. Treatment with standard acute, as needed migraine medications such as triptans may reduce the length of attacks if the spells are accompanied by headache. As with nonvertigo migraine, acute medications should be limited to 2 days per week, and if this is not up to the job, preventive medication may be needed.

In summary, vertigo associated migraine is fairly common in migraineurs. Diagnosis is made based on symptoms and history. Any unusual red flags such as hearing loss, ear fullness, new and sudden onset, and

long length of attacks require consideration for nonmigraine and urgent disorders. Treatment of vertiginous migraine is with migraine preventive medication, vestibular rehabilitation, physical therapy, and exercise, but the best scientific studies are lacking on the effectiveness of these treatments. Acute migraine medications from the triptan family show some evidence of benefit if used correctly for attacks.

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To find more resources, please visit the American Migraine Foundation