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Why Am I Dizzy? A Key Cause and a Simple Solution

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STORY AT-A-GLANCE

- Peripheral vertigo is a form of dizziness involving your inner ear. The most common cause of peripheral vertigo is benign paroxysmal positional vertigo (BPPV)
- BPPV occurs when crystal deposits in your inner ear become dislodged and end up in your ear canal. The crystals disrupt the flow of the fluids, thereby confusing your balance organs, resulting in vertigo — the feeling of movement or spinning even though you're stationary
- If a doctor diagnoses you with BPPV, they may recommend physical therapy to shift the crystal deposits in your inner ear into a location that won't affect your balance
- There are several different particle repositioning procedures that can accomplish this, including the Epley and Foster maneuvers. If you suspect you have BPPV, you can also try these at home to achieve relief. Instructions are included
- BPPV that is unresponsive to repositioning maneuvers may be treated with the drug betahistine. An all-natural alternative is to take ginkgo biloba, which has been shown to be just as effective as betahistine

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Benign paroxysmal positional vertigo (BPPV) is one of the most common forms of peripheral vertigo, meaning it stems from a problem in your inner ear, and not your

brain,[1,2] BPPV refers to a condition in which calcium carbonate crystal deposits in the labyrinth of your inner ear become dislodged and end up in your ear canal.

While your outer ear canal, eardrum and middle ear are involved in the transmission and interpretation of sound, your inner ear is not directly involved in hearing. Instead, the organs in your inner ear act as a gyroscope that informs your brain about your body's position in space and coordinates with your brain to balance your body as you move.[3]

The crystals disrupt the flow of the fluids, thereby confusing your balance organs, resulting in vertigo — the feeling of movement or spinning even though you're stationary. As reported by Medical News Today:[4]

> *"Moving the head can trigger vertigo because the solid crystals respond to gravity. The following head positions and movements can trigger vertigo in people who have BPPV:*
>
> - *Turning the head*
> - *Lying on the side of the head*
> - *Rolling over in bed*
> - *Bending the head forward*
> - *Leaning the head back"*

In severe cases, it may be difficult to maintain your balance sufficiently to carry out everyday tasks. It can also be accompanied by other nausea, vomiting, abnormal eye movements, headache, sweating, tinnitus, double vision and/or lack of coordination.

Other Causes of Vertigo

Aside from BPPV, which results when crystal deposits are misplaced, peripheral vertigo[5] can also be triggered by an abnormal production of fluid inside your inner ear, causing pressure to build. This is known as Meniere's disease.[6]

Inflammation (often caused by a viral infection[7]) in the labyrinth of your inner ear[8] (labyrinthitis) is another possibility that can cause vertigo. In this case, since the labyrinth contains both balance and hearing organs, your hearing will be affected as well.

Similar to labyrinthitis, vestibular neuritis refers to an inner ear infection, in this case affecting the nerves connecting your inner ear and brain, thereby disrupting the normal flow of sensory information.[9]

Another less common cause of peripheral vertigo is acoustic neuritis, which is when a nonmalignant tumor grows in the cranial nerve of your inner ear. As the tumor grows, it pushes against adjacent nerves, causing vertigo, hearing loss, headaches and facial numbness.

Anxiety and stress can also trigger vertigo, as the vestibular system (responsible for sensing your position in space) also interacts with brain areas involved in anxiety.[10]

Vertigo can also be caused by damage to your central nervous system (CNS, which includes your brain and spinal cord), which is known as central vertigo. Your CNS is responsible for controlling muscle movement and transmission of sensory stimuli to your brain. In central vertigo, damage or dysfunction in your cerebellum, the balance center of your brain, tends to be at play.[11]

Common underlying causes for central vertigo include concussion or traumatic brain injury,[12] stroke,[13] multiple sclerosis, vestibular migraine,[14] and tumors affecting your brain and/or spinal cord.

BPPV Diagnostic Tests

Most cases of BPPV-related vertigo will spontaneously resolve in a short amount of time, but if the problem persists for days or is chronic, seek help from your primary care physician. Tests that can help diagnose BPPV include:[15]

- Dix-Hallpike test — While lying on your back, your doctor will rotate your head. If you have BPPV, this will induce vertigo.
- Electronystagmography — This test involves observing your eye movements under various conditions, such as while moving your head or looking into a bright light.
- Electroencephalogram — EEG measures your brain activity, and could be used to rule out a more serious neurological condition.
- MRI — An MRI scan may also be used to examine your head and ears to rule out a more serious condition.

If a doctor diagnoses you with BPPV, he or she may recommend physical therapy to shift the crystal deposits in your inner ear into a location that won't affect your balance.

There are several different particle repositioning procedures that can accomplish this, including the Epley, Foster, Semont and Brandt-Daroff maneuvers.[16] If you suspect you have BPPV, you can also try these at home to achieve relief.

How to Perform the Epley Maneuver for BPPV Treatment

In this video, Dr. Christopher Chang explains how to perform the Epley maneuver, and how it works to resolve BPPV-related vertigo. A summary is as follows:

- Lie on your back with a pillow under your shoulder blades, such that your head leans backward 25 to 30 degrees. Tilt your head 45 degrees toward whichever side is causing the vertigo. Stay in this position until the vertigo stops, typically around 30 to 60 seconds
- Shift your head halfway to the opposite side (90 degrees) without raising it. Wait another 30 to 60 seconds
- Next, shift your body over to the side so that you're looking downward, toward the floor, with your head turned 45 degrees from the horizontal. Wait 30 to 60 seconds
- Slowly sit up. Avoid standing until or unless the vertigo has resolved

A study[17] in the June 2019 issue of Therapeutics and Clinical Risk Management looked at data from 359 patients treated at a Chinese clinic. The two maneuvers primarily used were the Epley maneuver and the "barbecue roll."

The most common cause for BPPV involved the posterior semicircular canal (73.5%), followed by the horizontal semicircular canal (22.5%) and multicanal involvement (3.3%). Particle repositioning maneuvers resolved 95.8% of posterior semicircular canal cases, 100% of horizontal semicircular canal and 75% of multicanal cases.

How to Perform the Foster Maneuver

Some find the Foster Half Somersault maneuver easier to perform, as you don't have to lie in bed. In the video above, Chang explains how to do it. Here's a summary:

- Kneeling on all fours, raise your head and look at the ceiling for a few seconds
- Tuck your chin toward your knees, allowing the top of your head to rest on the floor. Wait for the vertigo to stop, typically about 30 to 60 seconds
- Turn your head about 45 degrees toward the side causing the vertigo. Wait 30 to 60 seconds
- Keeping your head turned at a 45-degree angle, quickly raise up on all fours so that your head is level with your back (tabletop position. Wait 30 to 60 seconds
- With your head still angled at 45 degrees toward the affected side, quickly sit up. If needed, repeat the sequence after resting for 15 minutes

You can also find instructions for another, similar particle repositioning procedure, accompanied by drawings showing the body position, on the Cleveland Clinic's website.[18]

Other Treatment Alternatives for BPPV

BPPV that is unresponsive to repositioning maneuvers may be treated with the drug betahistine. According to The International Tinnitus Journal,[19] betahistine "provides short term relief for acute symptoms associated with BPPV by improving the microcirculation in the labyrinth …"

An all-natural alternative is to take ginkgo biloba. This Chinese herb is commonly used to treat vertigo as it helps regulate blood flow to your brain. According to one study,[20] ginkgo biloba is just as effective as betahistine.

Ginger-partitioned moxibustion, which would necessitate a visit to a qualified acupuncturist, is another alternative. It involves placing a thin slice of raw ginger on the skin (at the appropriate acupuncture point location) and then placing a burning piece of moxa on top.

In one study,[21] ginger-partitioned moxibustion at the acupuncture point known as Tinggong (SI 19) was found to more effectively improve vertigo than particle repositioning procedures alone.

Conventional Treatments for Other Forms of Vertigo

If an inner ear infection is at fault, treatment will need to address the infection. Since most inner ear infections are caused by viruses and not bacteria, antibiotics are typically not recommended, as they do not work on viruses. A number of natural remedies may be helpful, however, such as garlic, coconut oil or onion. For vertigo related to traumatic brain injury, you would need to look at concussion treatment.

Naturally, in cases where your vertigo is caused by a more serious chronic disease, such as MS or tumors, the treatment will need to address those conditions as well. Ditto for anxiety and/or stress-related vertigo, in which case cognitive-behavioral therapy can be helpful.[22]

If your vertigo is caused by a vestibular or balance disorder originating in your CNS, vestibular rehabilitation therapy may be recommended. As explained by Vestibular.org:[23]

"[A]fter vestibular system damage, people can feel better and function can return through compensation. This occurs because the brain learns to use other senses (vision and somatosensory, i.e. body sense) to substitute for the deficient vestibular system …

For many, compensation occurs naturally over time, but for people whose symptoms do not reduce and who continue to have difficulty returning to daily activities, VRT can help with recovery by promoting compensation."

Other At-Home Treatment Alternatives for Vertigo

Aside from the repositioning maneuvers discussed above, other at-home treatment strategies may offer relief from temporary or sporadic vertigo include the following:

- Stay well-hydrated — Even mild dehydration can cause vertigo, so be sure to stay well hydrated by drinking enough clean, pure water.
- Sleep with your head slightly raised — Upon waking, move slowly when getting out of bed and sit on the edge of the bed for a minute or two before standing.[24]
- Making sure you're getting enough magnesium may help prevent or relieve vertigo. According to Vertigotreatment.org, vestibular disorders are rare in "parts of the world where the magnesium is represented in a diet in large quantities."[25]

  You can also find more information on the "vertigo diet" used in the treatment of Meniere's disease and vestibular migraine on vertigotreatment.org.[26]
- Try these folk remedies — Ginger, a folk remedy with a long history of use for nausea and motion sickness, may also help relieve vertigo. Another option is to make an apple cider vinegar and honey shot. Simply mix two parts raw honey to one part apple cider vinegar. Stir and drink.
- Essential oil therapy — Essential oils known to address nausea and dizziness associated with vertigo include peppermint, ginger, lavender and lemon balm.[27]

Sources and References

- [1] MedlinePlus, Benign Positional Vertigo
- [2, 24] NHS Vertigo
- [3, 5, 11] Medicinenet.com Vertigo Overview
- [4, 15] Medical News Today August 27, 2019
- [6] Dizziness-and-Balance.com, Meniere's Disease
- [7] Menieres.org.uk Labyrinthitis
- [8] NHS Labyrinthitis
- [9] Vestibular.org, Labyrinthitis and Vestibular Neuritis
- [10, 22] Academy of Neurologic Physical Therapy, Dizziness Related to Anxiety and Stress (PDF)
- [12] Completeconcussions.com, May 11, 2017
- [13] Neurology 2014 Jul 8; 83(2): 169–173
- [14] Vestibular.or, Vestibular Migraine
- [16] Allergy & ENT Associates
- [17] Therapeutics and Clinical Risk Management June 11, 2019; 15: 719–725
- [18] Cleveland Clinic, BPPV Management and Treatment
- [19] The International Tinnitus Journal June 2017; 21(1): 30-34
- [20] International Journal of Otalaryngology 2014; 2014: 682439
- [21] Journal of Acupuncture and Tuina Science February 2016; 14(1): 31-35
- [23] Vestibular.org, Vestibular Rehabilitation Therapy
- [25, 26] Vertigotreatment.org January 21, 2019, Vertigo Diet
- [27] Vertigotreatment.org January 21, 2019, Essential Oils for Vertigo