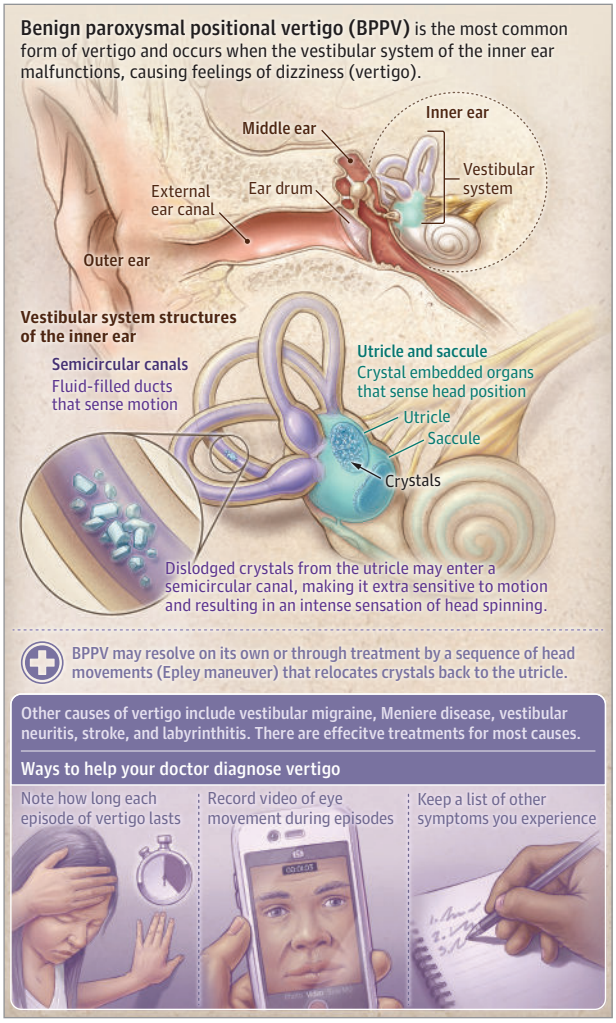
A Patient Primer on Vertigo—Spinning Out of Control

Vertigo is the symptom of feeling like you are moving when you are not, or that the world is moving when it is not.

Some people with vertigo feel spinning, some experience a rocking sensation, and others a sense that they are moving back and forth or side to side. It is a false sensation, happening when our brain or our inner ear balance system does not work properly. The part of the brain and inner ear that help us balance is called the vestibular system. The vestibular system also helps keep our vision steady when we move. If our eyes are the brain's camera, the vestibular system is the gimbal, stabilizing our view of the world from shaking as we move.

Part of the vestibular system is in the inner ear. It consists of the semicircular canals, which sense head turns, and the otolith organs, which sense gravity. Because the semicircular canals are normally activated by turning your head, when they malfunction, you can think you are turning your head when you are not. For example, one of the most common causes of vertigo is called benign paroxysmal positional vertigo (BPPV). Many people know this as "loose crystals" disease. Normally, we do have crystals in the ear, and they serve an important purpose of helping us sense gravity. They are located in 2 tiny organs called the utricle and the saccule, where they are suspended in a gel matrix, floating on a sea of hair cells. However, sometimes the crystals dislodge from the utricle and float through the mazelike network of tunnels in the inner ear, ultimately ending up in the semicircular canals. When that happens, simple position changes like rolling over in bed result in crystals moving around in the semicircular canals. This tricks the canal into thinking that a rapid and intense spinning is occurring. To counteract this, the vestibular system instructs the eyes to move in the opposite direction, resulting in a rhythmic twitching called nystagmus. In addition, because our brains trust our inner ears, the crystals fool us into thinking that we are spinning around.

It is useful to know that there are many other causes of vertigo in addition to BPPV. Some other causes include vestibular migraine (a type of migraine that causes vertigo or dizziness instead of headache), Meniere disease, vestibular neuritis, stroke, and labyrinthitis. Therefore, if you do experience vertigo, have it checked out by a qualified medical professional. Some things that can be helpful for your physician, including recording details of the vertigo, such as how long it lasted and any other symptoms that you had. Video recordings of your eyes during a vertigo attack, if possible, can be helpful to the medical professional. There are effective treatments for most causes of vertigo. These include physical therapy, medications, and surgery. By understanding the important job of the vestibular system, we can better evaluate and treat those suffering from vertigo, dizziness, and imbalance.



FOR MORE INFORMATION

University of California San Francisco Balance and Falls Center

https://ohns.ucsf.edu/balance-falls

Author: Jeffrey D. Sharon, MD

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Author Affiliation: Division of Otology, Neurotology, and Skull Base Surgery, Department of Otolaryngology-Head and Neck Surgery, University of California, San Francisco, San Francisco, California.

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