



WHEN THE WORLD IS OFF BALANCE

BY GRACIELA SHOLANDER

What do your ears have to do with balance? Plenty. That's why ear and hearing specialists are first in line when it comes to diagnosing and treating a wide spectrum of balance disorders.

The sense of hearing is associated with the ears, of course. But so is the sense of balance. Within the inner ear lies an intricate system that detects changes in head position and relays this information to the brain. Any problem with the balance sensing portion of either ear can translate into annoying, even debilitating, symptoms of dizziness and disequilibrium.

"The majority of balance issues break down into one of two categories," explains Mark Loury, M.D., board certified otolaryngologist at Advanced Otolaryngology, P.C., in Fort Collins. "One is episodic vertigo, where symptoms appear as an attack but the person is fine the rest of the time, and the other is chronic disequilibrium, where the person feels off balance all

the time to some degree."

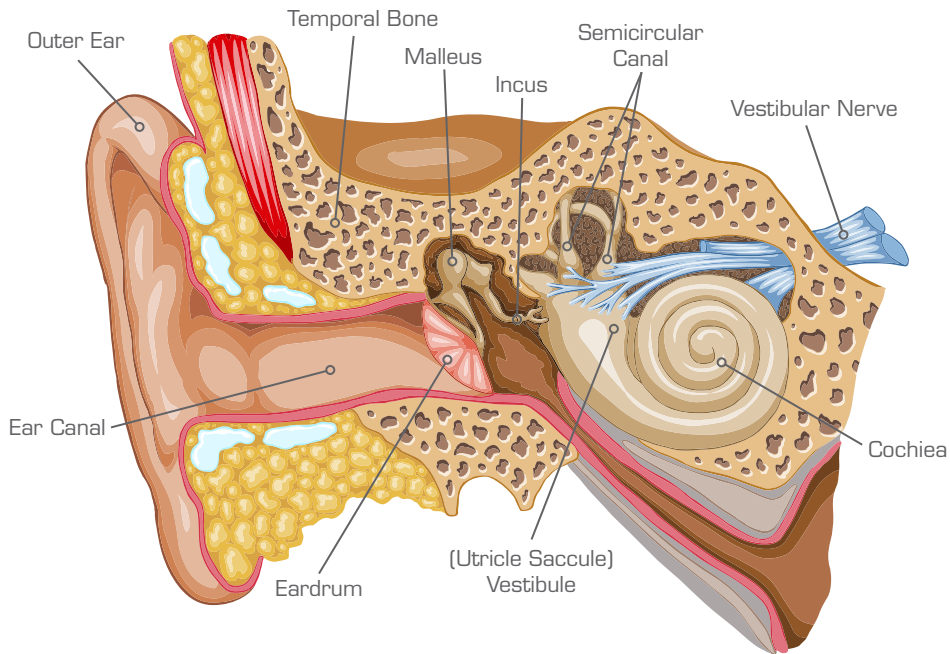
"With regards to symptoms, people will typically come in and say they have some perception of movement, either them moving within their environment or the environment itself moving, most commonly a spinning sensation. They may have other associated symptoms such as plugged ears, ringing or fluctuating hearing," he continues.

Natalie Phillips, Au.D., board certified doctor of audiology at Advanced Otolaryngology, adds the following to the list of balance-related symptoms patients may describe: "Lightheadedness. Loss of balance. Veering off to the right or left. It feels like you are spinning when you are stationary, or as if everything around you is spinning. Vertigo, particularly a whirling vertigo."

Such sensations can seriously disrupt a person's daily activities and impact quality of life. Some individuals with milder disequilibrium symptoms simply try to put up with them. Others have such severe symptoms that they can't function normally. In both cases, help is available. It begins with a visit to your family doctor.

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– Natalie Phillips, Au.D.,
Advanced Otolaryngology, P.C.



What To Expect

Since balance disorders can have one of many possible medical causes, some related but others unrelated to the inner ear, you should consult your general practitioner first. Depending on your symptoms, you may be referred to a neurologist, cardiologist, an allergist or a physical therapist. Most likely, though, you'll be advised to see an otolaryngologist, more commonly known as an ear, nose and throat (ENT) specialist. Many otolaryngologists work closely with audiologists, medical experts on the auditory (hearing) and vestibular (balance) systems of the ear.

"It is vital that we take a comprehensive medical history of each patient," says Dr. Phillips. "We look at the onset of dizziness. Was it sudden or gradual? We need to know the duration – does it last minutes, hours or days? Is the dizziness constant or does it occur in episodes? Are there accompanying audiological symptoms? Does the patient have any simultaneous cardiac changes? We check the family history. We especially want to know if the patient has a history of migraine or headaches. Were there any recent head traumas or changes in vision? Are there any neurologic symptoms such as tingling or clumsiness of other extremities? We also ask if certain positions aggravate the condition or make it better."

An accurate diagnosis relies on a complete medical history plus a series of tests. If the ear specialist concludes that the symptoms are related to the inner ear, then more diagnostic tests may be done or treatment may begin. But if the patient's symptoms and history point to a different source, such as the heart or the central nervous system, then a consultation with another specialist, such as an otolaryngologist, a neurologist or a physical therapist, may be necessary.

Possible Causes

Many inner ear-related conditions can throw off a person's balance, including Meniere's disease, benign paroxysmal positional vertigo (BPPV) and labyrinthitis, which is an inflammation of the inner ear. Meniere's is associated with a buildup in fluid pressure inside the inner ear. In addition to vertigo

attacks, Meniere's is associated with fluctuating levels of hearing loss, tinnitus (ear ringing or roaring) and a sense of fullness in the effected ear.

BPPV, a fairly common diagnosis, results when crystals inside the ear become dislodged. "Calcium crystals, normal structures in the inner ear, break loose and float into another part of the ear," explains Dr. Loury. "This causes a spinning sensation. Each episode is brief, on the order of seconds to less than a minute." The sense of spinning is usually triggered by movement, such as getting out of bed, into bed, or when lying down and rolling over onto the side."

Rarer conditions include perilymphatic fistula, Ramsay Hunt syndrome, vestibular neuritis (thought to be a viral infection of the balance nerve going from the inner ear into the brainstem) and superior semicircular canal dehiscence syndrome (SSCDS). The fistula is an abnormality between the middle and inner ear, while Ramsay Hunt is shingles of the ear resulting from a herpes virus. SSCDS involves a defect of the bone that overlies the inner ear canal. The proper diagnosis is vital for getting effective treatment.

What gives rise to these various conditions? That can be tough to pinpoint. Some balance problems begin with allergies or a bad cold. Others are due to autoimmune disorders. A head injury can trigger episodes of vertigo or disequilibrium. Chronic neck pain or stiffness can cause vertigo or imbalance. In some cases, it's unclear what, exactly, brought on the condition.

Spectrum of Treatments

Treatment depends on the diagnosis and can range from oral drugs for symptom alleviation to physical therapy for balance retraining to surgical procedures. Treatment for BPPV involves repositioning the dislodged ear crystals. "We do repositioning maneuvers to get the crystals back to where they need to go," says Dr. Phillips. "It's a nice, simple treatment where the patient gets pretty immediate results. The tricky thing is that this condition can spontaneously occur, resolve and reoccur. People who try to do these maneuvers at home may actually make it worse."

For some conditions, anti-nausea drugs may

be prescribed. Certain patients will benefit from a low-salt diet or other dietary adjustments. Surgery may be needed to correct physical abnormalities associated with particular disorders. Many patients benefit from rehabilitation therapies. A physical therapist certified in vestibular rehabilitation, for example, can teach an individual with balance issues how to retrain the brain to make sense of otherwise confusing signals.

Finding Hope

David Johnson, a 27-year-old who works in traffic control for the Colorado Department of Transportation, has been experiencing inner ear balance-related symptoms. "I'd describe it as a disconnected feeling, foggy-headedness, a drug-like state and a little pressure in my right ear, on and off for five years now. I don't have hearing loss, but sometimes loud noises, such as at a concert, will make my ear static sounding, almost robotic."

It began when he was in college. He woke up one day with the sense that something wasn't quite right. Basically, it was a feeling of disorientation. He'd had a cold a week earlier, but nothing else. Finally doctors made a connection to his inner ear and vestibular neuritis – an inflammation of the inner ear's vestibular nerve – was suspected.

His symptoms cleared up after a month, but they returned again a year later and lasted several months. "It's hard to cope with," he says. "I don't feel that I'm bringing one hundred percent to what I do, at least not every time." After five years of dealing with these on again, off again symptoms, Johnson decided to once again seek medical attention. A consultation with Dr. Phillips and further tests have opened up a new possibility: fluid buildup in part of the inner ear. With another path for his doctors to explore, Johnson is encouraged. "I'm feeling hopeful now that I have a diagnosis."

Early Intervention

Pinpointing the source of a balance problem and coming up with an accurate diagnosis involves a good amount of detective work. It requires a thorough analysis of the patient's medical history, closely evaluating all symptoms, running a number of relevant tests and putting all the pieces together. Occasionally another specialist, such as a neurologist, must be consulted before a definite diagnosis can be given. It can take time and effort, but it's worth it when you consider the goal: alleviation and, when possible, elimination of dizziness and other symptoms affecting balance.

"If you don't find the answer, seek a second opinion," recommends Dr. Phillips. "It's helpful to go to a clinic with the proper equipment and multiple specialties within the same office to be able to collaborate and intervene earlier."

"For people who have some of these balance problems, it is better to intervene earlier than later," adds Dr. Loury. "The reason being that it's been shown the sooner you can intervene, the more rapid the recovery will be and the more complete the return to better function will be." ✚

Graciela Sholander is a Northern Colorado writer and author of *Dream It Do It: Inspiring Stories Of Dreams Come True*, www.dreamitdoit.net.