

What doctors want patients to know about vertigo

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Sara Berg, MS

News Editor

Navigating the complexities of inner ear disorders, one symptom stands out for its disruptive impact: vertigo. This sensation of spinning or dizziness can strike without warning, leaving patients disoriented and vulnerable. And it's not something patients should "just deal with" or must live with. There is relief.

The AMA's What Doctors Want Patients to Know™ series provides physicians with a platform to share what they want patients to understand about today's health care headlines.

In this installment, three physicians took time to discuss what patients need to know about vertigo. They are:

- Deema Fattal, MD, a neurologist and clinical professor of neurology and otolaryngology at the University of Iowa Hospitals & Clinics, and chief of neurology at the Veterans Affairs Iowa City Healthcare System. She specializes in balance disorders including vertigo. University of Iowa Hospitals & Clinics is a member of the [AMA Health System Program](#), which provides enterprise solutions to equip leadership, physicians and care teams with resources to help drive the future of medicine.
- Man-Kit Leung, MD, an otolaryngologist in San Francisco who serves as a delegate for the California Medical Association in the AMA House of Delegates.
- Benjamin Wycherly, MD, an otolaryngologist in Farmington, Connecticut, who specializes in treating patients with vertigo.

Vertigo is a symptom

It is important to note that “vertigo is a symptom, not a medical condition. Just like sore throat or ear pain,” said Dr. Leung.

Because “vertigo is more of the symptom, then the question is why? And there are different causes,” Dr. Wycherly said, noting “sometimes it does come on very suddenly and other times it can build a little more gradually.”

It is a sense of movement

“Vertigo is a feeling like you’re in motion. Things are moving or you’re moving when you’re really not,” Dr. Wycherly said, noting “we often talk about dizziness, which is more of a broad term. Vertigo is a more specific type of dizziness. It’s that sense that you’re moving.”

“In a really intense situation, it’s usually felt as spinning, but may also be perceived as a floating feeling in a milder case or a rocking feeling,” he said. “If you feel like you’re on a boat and the boat is rocking back and forth, that sensation of movement is what we call vertigo.”

Most vertigo has ear causes

“Benign paroxysmal positional vertigo (BPPV) is one of the most common causes of vertigo. By definition, BPPV is not indicative of some underlying malignant disease such as cancer,” Dr. Leung said. “It is caused by crystals inside the inner ear being dislodged from their normal positions. Most vertigo are 80% or 90% peripheral causes or ear causes. And then about 10% or 20% are the central causes.”

Those causes are what “you really worry about—strokes or multiple sclerosis or brain stem tumors or even bad migraines, for example,” he said.

Other causes of [vertigo](#) are Meniere’s disease and “acute vestibular syndrome (AVS)—the latter being mostly due to inner ear conditions, such as a viral inner ear infection—but an estimated one-quarter of AVS is due to a brain condition such as stroke,” Dr. Fattal said,

explaining that “AVS is a condition where a person starts having vertigo one day. It is mostly due to viral inner ear infection. But in a minority, it can be due to a stroke.”

“It is important to note that these different diseases that cause vertigo can sometimes manifest in some patients as just dizziness and without a spinning sensation,” she said. “For example, 30% of BPPV patients do not describe a sense of spinning with their dizziness.”

Length of vertigo episodes varies

When it comes to episodes of vertigo, they “can be 30 seconds or days. Also, a person may have chronic dizziness for months or years,” Dr. Fattal said, noting that some causes of vertigo “if you actually time it in the lab, it lasts less than a minute—typically 20 seconds, 40 seconds. But people can have this residual sense of being off balance and this is when they feel like it’s five minutes or 20 minutes or even all day.”

This is when physicians will have to figure out the exact length of the vertigo: Is it 30 seconds or is it really 20 minutes or all day. They will ask if your vertigo is worse when changing position such as when you bend to pick up your laundry or some other movement such as tilting your head back when getting your hair done.

An example of vertigo that is triggered by position change is BPPV, where the loose crystals move when the person changes position, causing the vertigo,” said Dr. Fattal. “Such causes are very easy to treat. And very easy to diagnose.

“We will have the patient tilted back on the exam table and then see if their eyes jump (nystagmus),” she added. If a patient’s eyes do jump in a certain way, then “you can diagnose the type of BPPV and treat it right there.”

History is key to diagnosis

Spinning—a form of dizziness—is vertigo, “but in neurology it really doesn’t matter how you describe it,” Dr. Fattal said. “This is because whether the person has dizziness that they

describe as spinning, lightheadedness, imbalance or any other type of dizziness, their risk of stroke is independent on the type of the dizziness. That vertigo versus any other type of dizziness have equal chance to be on the basis of stroke.

“The key is the history—when it started, how it is changing over time, how long each episode lasts, what are the triggers, and any associated symptoms,” she added. “For example, a dizziness that is recent in onset, such as it started within the last few days or weeks, then it could be on the basis of a stroke or warning for a stroke. While, if someone has recurrent dizziness for years, this is not likely to be on the basis of a stroke.”

Expanding on that, Dr. Leung noted, “as a physician, you have to listen to the patient’s history so you can look at their risk factors. If they’re older with a history of heart disease, maybe even a prior stroke, then you become more concerned about central causes of vertigo.”

“The history also tells you how long it’s been going on. If the vertigo is only seconds or minutes, then maybe it’s related to the peripheral causes, but if it’s lasting hours or days, then you worry more about a brainstem or a brain issue,” he said. “If you have vertigo with just sitting there, then you worry more about a brain issue. But if it’s triggered by movement, then maybe it is an ear issue.”

A physical exam can help too

While history is key to diagnosis, a physical exam can help too. For example, Dr. Leung performs a Dix-Hallpike maneuver where he would lie the patient down, turn their head and see if their eyes spin, which is called nystagmus.

“If their eyes do spin in a certain position and it stops, then it is more likely a peripheral cause. But if they keep spinning and it doesn’t stop, then I worry about a brain issue,” he said. “If the nystagmus changes in direction, the eye spins certain ways side to side or up and down, then I’m more worried about a brain issue than a peripheral issue.”

“Other things that we teach people is that if they have slurred speech, if they have weakness on one side of the body, then this is more [worrisome for a stroke](#),” Dr. Leung

said.

Positioning can impact vertigo

With BPPV, there are tiny calcium carbonate crystals—called otoconia—that detach from the utricle in the inner ear and move into the semicircular canals instead. As a result, changes in your head position can trigger episodes of vertigo.

BPPV is “the most common cause from the inner ear. ... This is a problem where little crystals in the inner ear get out of place,” Dr. Wycherly said. “There are these little sand-like stones—they’re crystalline in shape—that are in a certain part of your inner ear, and they help you sense the pull of gravity and acceleration and deceleration.”

“What can happen is you are lying in bed, and you roll over to your side to look at the alarm clock and you get a sudden burst of spinning vertigo,” Dr. Wycherly added. “It’s because when you’ve turned your head, the stones have gotten out of place, and they’ve shifted in the inner ear. That induces a sense that you’re spinning.”

Vertigo can be caused by migraines

“Another common cause that is episodic—meaning the vertigo would come and go—is migraine. About one out of three [patients who get migraine](#) headaches will experience vertigo,” Dr. Wycherly said, noting the vertigo “could accompany the headache or it could occur even without a headache.”

“Migraines are so common and that just means that vertigo from migraine tends to be common too. So, if a patient is having episodes of vertigo, the two most common causes would be BPPV or migraine,” he said.

It could be Meniere’s disease

“There’s an inner ear condition called Meniere’s disease,” which is a chronic disorder that affects balance and hearing, said Dr. Wycherly, noting it “is not nearly as common as

BPPV or migraine. A migraine is probably about eight to 10 times more likely than Meniere's disease, but it's still fairly frequent in terms of an ear condition."

Patients with Meniere's disease "will have episodes of vertigo, usually lasting half an hour to a couple of hours that can be very intense and incapacitating and unpredictable, but they almost always have a symptom of hearing loss or ringing in their ear either immediately before or during the onset of vertigo," he said. "And it's usually just in one ear. So, if someone is saying that their hearing has been going in and out in one ear and they developed vertigo, it's very likely that they may have Meniere's disease."

Treatment depends on the cause

"Treatment is dependent on the cause of vertigo. For example, for BPPV, a simple physical therapy maneuver such as the Epley maneuver, can be used to treat vertigo," Dr. Fattal said.

The Epley maneuver is an exercise that helps treat symptoms of BPPV through a series of head movements.

With the Epley maneuver, the focus is on turning your body [through specific movements](#) to move the crystals into a different part of the inner ear where they won't cause symptoms. The movements are different for each ear. Your physician can provide guidance on how to perform this procedure.

Additionally, "if the vertigo is Meniere's disease related, a water pill can help," said Dr. Fattal. And "if it is migraine related, treating the migraines can help."

Know when it's an emergency

It is important to go to the emergency department if the vertigo "is a sudden onset and is associated with ... the person literally crawling or cannot walk," Dr. Fattal said. Other reasons to go to the emergency department include a "new, meaning it started today or over the last few days or few weeks, and a sudden onset of neurological symptoms—clumsiness, weakness, numbness, facial droop, hiccups, slurred speech,

hearing loss, new headache, new neck pain, swallowing problems—or if the person is older and has hypertension or diabetes.”

Additionally, “there’s a condition called labyrinthitis or sudden sensorineural hearing loss. If you have vertigo and loss of hearing at the same time, that could be an emergency, meaning that your hearing may not recover,” Dr. Leung said. “Urgently see your doctor if you have sudden hearing loss and vertigo at the same time.”

Over-the-counter medicines can help

For vertigo, there is a generic over-the-counter medicine “called meclizine. It’s also called Antivert, or Bonine,” Dr. Leung said, noting “that is over-the-counter medicine, and it helps with dizziness and nausea as well. Many times, nausea accompanies vertigo and dizziness.”

“They’re usually sold to people with motion sickness,” he said. “So, if you’re going on a cruise or going on fishing trips, this is something people would pick up just in case.”

Pay attention to exercise, food and drinks

“Dehydration can put us at risk of being dizzy. For some conditions, such as Meniere’s disease, a high salt diet could trigger dizziness,” Dr. Fattal said. Beyond that, [nutrition](#), exercise, sleep and stress (NESS) are important to keep in mind and keep in check “because if you’re not eating well or you are skipping meals, that may put you at higher risk of getting a migraine, which in some persons can cause dizziness.”

“If you’re not exercising, your mood may drop, then your headaches may be more and then your dizziness may increase,” she said. “And if you don’t [sleep well](#), your migraines, your dizziness, your mood, your memory will be worse.”

Finally, stress also “can trigger or worsen any condition. Exercise is a great way to reduce stress,” Dr. Fattal said. “Also, relaxation techniques such as long exhales help reduce your heart rate and reduce anxiety sensation. So be mindful of your NESS.”

Ensure vitamin D levels aren't low

"In the case of BPPV, the one thing you can do is take a vitamin D supplement if you're vitamin D deficient," Dr. Wycherly said. This is important because "vitamin D is involved in calcium absorption and low calcium can sometimes present as osteopenia or osteoporosis.

"And patients with osteopenia and osteoporosis and low vitamin D have higher risk for BPPV," he added, noting "that those little stones are made up of calcium carbonate. So, those stones are probably not being formed normally if calcium is deficient."

Track your salt intake

For vertigo, "what we usually recommend for patients in terms of lifestyle is to [track their sodium intake](#) for a period of time," said Dr. Wycherly. This is "to make sure that they're not exceeding a certain amount of sodium in a 24-hour period—to try to space their sodium out evenly throughout the day."

"The average American diet is about 3,400 milligrams of sodium in a 24-hour period, which is pretty high," he said, noting "the American Heart Association recommends no more than 2,300 milligrams a day, but the ideal amount is no more than 1,500 milligrams in 24 hours" for most adults, especially for those with [high blood pressure](#).

Don't just "put up with it"

Vertigo is "not just something you need to live with. Sometimes you hear, 'I was told I had vertigo and I just had to deal with it,'" said Dr. Wycherly. But patients shouldn't just "deal with it" or "live with" vertigo.

"The longest I've seen is 20 years of undiagnosed vertigo, which is really sad. We can diagnose and help vertigo and dizziness in the vast majority of patients," Dr. Fattal said.

That is why patients "should be pursuing vertigo with an ear, nose and throat specialist or start with their primary care physician," Dr. Wycherly said.

Their primary care or ear, nose and throat doctor can refer to neurology if needed, such as if it is a migraine issue or for other brain causes.