

Sense of Balance

Win the battle with vertigo through specialized testing

For more than a decade, Tamera Dillen's teaching career was on the rise. She had successfully climbed the educational ladder, eventually making the leap from paraprofessional to full-time high school teacher. Then, one night last fall, everything in her world began to fall down around her.



DEVANG SHAH, MD

At least, that's how it seemed.

"It was around 9:30 at night," Tamera remembers. "I was just sitting at home watching TV when, all of a sudden, I got dizzy, and when I opened my eyes, it seemed as if everything around me was falling. It was so bad that I got really sick and began vomiting everywhere, and I couldn't walk without falling over."

The problem persisted through what proved to be a mostly sleepless night and into the next morning. That's when a frightened and bewildered Tamera called her daughter and asked her to take her to the emergency room, where she was eventually admitted for what proved to be a two-day hospital stay.

"Even after we got out of the emergency room, I was still very nauseated, and I couldn't walk without assistance because I was so dizzy," Tamera relates. "I was scared to death because the problem wasn't going away, and I had no idea what was wrong with me. I had never experienced anything like that before."

During Tamera's hospital stay, doctors first performed an MRI and a CT scan. That eliminated a brain tumor or some kind of brain trauma as the cause of her dizziness and nausea. Doctors then ran a series of tests and discovered the problem was actually the result of vestibular nerve damage and that she was suffering from vertigo.

"The damage was to the vestibular nerve in my right ear, but the doctors couldn't really say what caused the damage," Tamera explains. "As for vertigo, the doctors told me that was a symptom of the nerve damage. I had heard of vertigo before, but I really didn't have any idea what it was like to have it until then. I really had no clue at all."

Team ENT

As a result of their findings, the doctors at the hospital referred Tamera to the vertigo specialists at Atlanta Ear, Nose and Throat. At Atlantic ENT, the doctors take a team approach that starts with the patient seeing a physician's



Audiologist Dr. Lisa Krebs (right) conducts a VNG test.

assistant who has been trained specifically in treating patients with vertigo.

"After that, one of our audiologists performs a vestibular nystagmogram, or VNG," explains Devang Shah, MD. "That is a test that records the motion of the eye as different stimuli are applied to the balance organ."

"We try to put the patient in different head positions to see how the eyes react, and we put warm and cold air in the ear canal, which also stimulates the balance organ and allows us to measure the response to that."

"When there's an abnormality that can be measured, it will show up on the test and then we are able to get an idea of why it is the patient is having the dizziness. In some cases, it is the balance organ that is damaged. In those cases, there is nothing that can be done specifically for the balance organ itself."

The VNG given to Tamera showed that she was suffering from unilateral vestibular hypofunction, a condition in which the balance system in the inner ear, the peripheral vestibular system, is not working properly. There is a vestibular system in both ears, so unilateral means only one system is impaired, while the other is working normally.

In Tamera's case, Dr. Shah and his team determined that it was indeed the right balance organ that was damaged and causing the vertigo. Tamera's vertigo was severe, but in patients suffering from unilateral vestibular hypofunction, the vertigo can be mild and can actually disappear on its own after a few days or weeks.

That was not the case with Tamera. Two weeks after leaving the hospital she was still experiencing many of the symptoms associated with unilateral vestibular hypofunction. She

was still suffering from vertigo, poor balance and blurred vision and was having trouble walking either outside or in darkened rooms.

Tamera was clearly suffering from an acute case of unilateral vestibular hypofunction, so the next step the doctors at Atlantic ENT took was to refer her to a physical therapist who specializes in training patients to compensate for the effects caused by the damage done to the balance organ.

"It was tough learning that I had suffered damage that could not be corrected, but I was pleased to know what was causing my vertigo and why," Tamera discloses. "I was also pleased to learn that

there was something I could do to deal with vertigo, because that was one of the most difficult things I've ever dealt with."

Back On Her Feet

Tamera only missed a week of work as a result of her vertigo, but for a month, she had to catch a ride to work from another teacher who lived nearby because she was prohibited from driving. Walking remained an issue for a while as well. It wasn't until after a couple of weeks of balance retraining that Tamera was able to walk normally again.

"For a couple of weeks there, I literally had to hold on to the walls and walk very slowly because I was still feeling a bit dizzy," Tamera acknowledges. "But the therapy helped a lot with that. I wound up doing two rounds of the therapy, and each round lasted about four or five weeks."

During her therapy sessions, Tamera was asked to do a variety of exercises that are designed to retrain the body to balance itself. Among them are a series of eye exercises and simple walking exercises that are eventually combined in a way that allows the patient to regain their balance and live normally again.

Now several months removed from her balance retraining, Tamera says she is just about back to being her old self. She still has the occasional dizzy spell, she reports, but they pass quickly. She also struggles at times to walk in the dark or while looking off into the distance when outside. Other than that, she says, she's fine.

"I feel good, a lot more like the old me again," she relates. "Things were pretty rough there for a while, but the doctors at Atlantic ENT did a great job figuring out what the problem was and how to rectify it. I'm so glad they were there for me and so happy for all that they did to help me get back on my feet."

FHCN article by Roy Cummings. Staff photo courtesy of Atlantic ENT. mkb

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-Tamera



Devang M. Shah, MD, is board certified in otolaryngology. After receiving his medical degree with honors from Robert Wood Johnson Medical School, he completed his surgical internship and residency at Johns Hopkins Hospital in 1997. Dr. Shah is a member of the American Academy of Otolaryngology – Head & Neck Surgery and has served as chair of the department of surgery at Florida Hospital Fish Memorial, Orange City. He coauthored several journal articles investigating the relationship between microscopic inner-ear structures and hearing function and has presented his work at research conferences.

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