

A Cure For Tinnitus at UTD?

By Jesse Hughey
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Joel Styzens was a serious professional drummer and percussionist, practicing three to four hours a day and playing three to four hours a night at gigs. He did this six or sometimes seven nights a week with big jazz bands and percussion ensembles-until one morning, three years and four months ago, when he woke up with a high-pitched ringing in his ears.

It was like the tone of an old tube television warming up, maddeningly steady. Obsessed with the incessant ringing, he figured out all he could about it. It seemed to have multiple tones, some in harmony with each other, some clashing. But the dominant note was a high A-sharp. For a lifelong musician, the first manifestation of tinnitus was a terrifying sound.

"Everything I was working toward all my life, how I identified myself-suddenly it was all up in the air," he says by phone from Chicago. "It was so bad at first, I was hearing sounds distorted in my left ear, crackling, and my ears were so sensitive sometimes I could barely go outside. I didn't know if I could ever play drums again, or even music."

Ennis investment banker Kenneth Smith, 74, started developing his symptoms in the early 1990s. Unlike Styzens' constant tone, his tinnitus sounds like thousands of crickets in the room with him. Doctors told him he would have to learn to live with the phantom sounds, which he tried to do. Vitamins sold as tinnitus relief provided none, so he tried to mask the sound by keeping the radio or television on at all times. But about a year ago, the volume of the crickets grew so intense that he could no longer think, let alone concentrate on his work.

"I had heard of people committing suicide because of tinnitus," Smith says. "I would never do that, but frankly, I thought it might be the only solution."

One day, his wife walked in on him banging his head against a wall and drew the line: He had to do something.

More than 50 million Americans suffer from tinnitus, according to American Tinnitus Association estimates. Of these, some 12 million patients have tinnitus severe enough to seek medical attention, and 2 million are unable to function on a day-to-day basis. The disorder often accompanies hearing damage caused by exposure to loud noise, including music, resulting in such famous sufferers as Eric Clapton, Pete Townshend, Neil Young and My Bloody Valentine's Kevin Shields. But noise isn't always the cause. Symptoms can manifest after viral infection, stroke, injury or change in medication. Styzens noticed his symptoms after a particularly busy few months of music gigs. Smith, however, hasn't been exposed to much loud noise. He doesn't crank up the volume on his preferred country and classical music or go to rock concerts, nor does he work around loud equipment.

Worse, the disease has no cure and just a few options for relief. But a promising new therapy has made its way from Australia to the States. The Callier Center for Communication Disorders at University of Texas at Dallas is one of about 200 medical centers offering Neuromonics, a treatment device for tinnitus developed by an Australian audiologist, Dr. Paul Davis.

Styzens and Smith are among the earliest users of Neuromonics in the world. Styzens started the treatment at an audiology clinic in Highland Park, Illinois, while Smith is one of about 30 patients undergoing the treatment through the Callier Center.

Dallas audiologist Anne Howell, head of Callier's tinnitus clinic, says the treatment works by retraining neural pathways in the brain. As a result, the auditory system is desensitized to the sound.

The Neuromonics device, which looks like a portable MP3 player, plays four tracks of music and ambient nature sounds. Overlaying the soothing music is the neural stimulus treatment, which targets the brain's auditory pathways and helps the brain filter out the disturbing tinnitus perception. The music and overlaying neural stimulus on each device is customized to the patient's audiological profile and personal tinnitus frequency ("frequency" here meaning pitch, not how often it occurs). The customization requires tests to determine the frequency and intensity of the disorder's symptoms for each ear.

According to data presented at last month's AudiologyNOW! conference in Dallas, a multi-site, 45-patient study showed that the average Neuromonics patient's drop in Tinnitus Handicap Inventory (THI) score is a clinically significant 26-point reduction from a moderate level of 46 to a mild level of 20.

Thus far, the demands of the treatment will probably limit its use to patients with the most severe symptoms. Neuromonics requires six months of daily use, at a minimum of two hours per day, preferably at the times when the tinnitus is most bothersome. The treatment is expensive too, running from \$4,000 to \$6,000—and insurers are predictably reluctant to shell out for it.

"There's a variety of reasons that insurance companies say when they send back claims saying 'No, we're not going to cover this,' but coding is one of the biggest things," Howell says. "Neuromonics has been lobbying to get coding so that insurance companies will pay for treatment. It's a barrier for people who can't pay cash out of pocket."

Another barrier for patients is the lack of tinnitus understanding among primary care physicians, Howell says. All too frequently, doctors dismiss the symptoms and tell patients to get a grip and learn to live with it. For musicians, though, that's not always possible. One of Howell's patients, a classical musician, had to stop teaching lessons; another musician patient struggled to continue teaching. Citing privacy concerns, these two locally treated musicians declined comment for this story.

But Smith calls the device a life-saver. He noticed some relief of his symptoms within just two days of using it. Some six months after starting, his symptoms had improved so much, they were noticeable only when he thought about them.

"My children said they've never seen such a change in me," he says. "It's made an unbelievable difference."

Styzens, too, says the device has provided an immense emotional and psychological boost. Even so, the tinnitus has forced major changes in his music career. He still teaches percussion, but now uses electronic drums amplified at low volume rather than live drums. As for his own music, he now writes and records soothing instrumental songs for acoustic guitar. In fact, he's gone so far as to start his own record label to collaborate with and support musicians with hearing ailments.

The label is named for the single note that threatened to derail his career but has since been relegated to background noise: A-Sharp

