

Buzz Kill: Scientists Aim to Stop Ringing Ears

Tinnitus Has No Cure; Some Sufferers Found Relief in New Treatments

By LAURA ZACCARO, CATHY BECKER and IMAEYEN IBANGA

April 7, 2008 —

Imagine waking up daily and hearing the sound of a whistling tea pot or having constant ringing in your ears that never goes away.

Fifty million Americans deal with these inescapable sounds, which can make life difficult, according to the American Tinnitus Association.

Tinnitus sufferers hear a perception of sound in their ears or head where no external source is present.

"The sounds will be a hissing sound, SSS ringing sound," said Dr. Richard Salvi, of the University of Buffalo. "There's no way to escape from it."

Tinnitus has become more common with the introduction of MP3 players and even combat veterans have become extremely sensitive to noise.

Researchers still are unsure what causes the ringing sensation, though they suspect it can be brought on by exposure to loud noises, which damage delicate hair cells in the inner ear.

But scientists now are learning that for some, tinnitus does not originate in the ear, but rather, in the brain. As researchers try to find a cure for the condition, about 2 million tinnitus sufferers are debilitated so badly, they are unable to function on a normal day-to-day basis, according to the ATA.

The constant noise can take an emotional toll.

"I thought of suicide constantly. That was the only way I could eliminate my torture," said Carol Brooks, whose problems began after a car accident.

Tinnitus Treatments

Eventually Brooks found relief with a sound generator, which makes tinnitus less noticeable and trains the brain to ignore the sounds.

"I was thrilled. Two-and-a-half months into the treatment I was able to walk out on the street and tolerate the wind, "Brooks aid.

The sound generator is just one of the ways to deal with the condition. Another treatment requires patients to wear what looks like an MP3 player for two hours day. The device, which is called Neuromonics oasis, delivers a special sound whose frequency is personalized to a patient's hearing loss.

The idea behind it is that it masks tinnitus and helps to change the way the brain hears the noise.

Tinnitus creates two distinct problems for the patient, said "Good Morning America" medical contributor Marie Savard. One is the sound and the other is the emotional response that occurs because of that sound.

The Oasis tries to treat both problems at once, she added.

"They hear a specially created stimulus designed to interact with or interrupt the sound the patient hears and that stimulus is camouflaged in music, making the process more pleasant for the patient," Savard said.

With ongoing treatment, technicians will adjust the stimulus and hopefully decrease the brain's sensitivity to the tinnitus sound, Savard said.

"Within two months my sensitivity to loud sounds and music went down incredibly," said Michael Celotto, who began having hearing difficulties after playing with his rock band one night.

Savard said it's important to note up to 90 percent of all tinnitus patients have some level of hearing loss. So one of the first things a doctor should do is assess a patient for correctable hearing loss and treat it with a hearing aid or a cochlear implant, if appropriate.

"We find that increasing a patient's hearing can alleviate some tinnitus symptoms," she said.

For more information on tinnitus visit American Tinnitus Association.

Copyright © 2008 ABC News Internet Ventures