Conventional Treatments for Tinnitus Relief Transcript

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Tinnitus impact and how severity is measured

"Conventional Treatments for Tinnitus Relief" Because chronic tinnitus is a condition that negatively impacts the quality of life for millions of people worldwide, a safe and effective treatment has been sought for millennia, with medical records dating back 5,000 years proposing treatments for a "bewitched ear." The more bothersome the tinnitus, the greater the negative impacts on sleep quality, concentration, and conversational speech, along with potential increased risk of anxiety, depression, and cognitive impairments.

So, what can be done to make tinnitus less bothersome? To answer this question, we first need to know how tinnitus is measured. Survey-style measurement tools are used to assess the severity of tinnitus and to determine what treatments actually improve symptoms.

The THI is frequently used in clinical research and practice to quantify tinnitus-related handicaps and the complex functional and emotional impacts.

Guideline-backed treatments: counseling, CBT, hearing devices, and sound therapy

The minimal clinically important difference represents exactly that, the smallest change in treatment outcome deemed to be make a meaningful difference.

For the THI score, a drop of about 7 points makes the cut, while a more recent study estimated an 11-point reduction is needed. So, something in the range of a 7- to 11-point drop we should expect for a minimally effective treatment.

The scope of potential treatment options is wide, but not all are supported by robust evidence. Several clinical guidelines published between 2014 and 2023 most often recommended educational counseling, helping people better understand their condition, and cognitive behavioral therapy, also called CBT.

A new 2025 guideline by the U. S. Department of Veterans Affairs and Department of Defense also recommended these approaches, along with hearing devices for those with impaired hearing, sound-based therapy, alone or combined with CBT or educational counseling, and physical therapy for those who have a co-condition like TMJ.

Now, the clinical guidelines considered the strength of the evidence "weak" but supportive for these interventions. No intervention was rated any higher.

Arguably, CBT has some of the strongest evidence, as found in this Cochrane Systematic Review. CBT targets improving thoughts, feelings, and behaviors associated with tinnitus and can reduce the impact of tinnitus on people's quality of life, the equivalent of about 11 points on the THI index.

Compared to other treatments, like tinnitus retraining therapy, which involves both counseling and sound therapy, it may be superior by about 15 points, but the evidence was less certain.

Invasive options, neuromodulation, and Lenire approval

CBT is also flexible. It seems to work whether delivered in-person, online, by phone, individually, or in groups. The additional plus to CBT is that it has few or no adverse effects, which can't be said for more invasive treatments like injecting corticosteroids into the eardrum, which clinical guidelines specifically recommend against, along with low-level laser therapy.

Now, not all invasive treatments are bad. If someone has another ear condition that needs to be treated, like vestibular schwannoma, a benign tumor in the ear that can damage nearby structures, surgery may be warranted.

Similarly, if hearing loss is impacting someone's ability to communicate, then something like a cochlear implant may make sense, which can substantially improve tinnitus in those patients, though the benefit may fade over time.

Another proposed strategy is neuromodulation, which uses electrical or electromagnetic stimulation to influence neurons in the auditory pathway as well as in emotional and attention centers of the brain.

So far, clinical guidelines have considered there to be "insufficient evidence" to make a general recommendation for or against neuromodulation. But the evidence for one type has made the cut, both in the U. S. and Europe: Lenire bimodal treatment.

Due to positive efficacy and safety outcomes, the U. S. Food and Drug Administration approved its use for tinnitus in March 2023. A series of large randomized clinical studies showed bimodal neuromodulation, combining sound and tongue stimulation, significantly reduced tinnitus symptoms for up to 12 months after treatment, the caveat being that not all participants improved, and there doesn't appear to be any placebo-controlled studies with sham devices to prove they actually work for anybody, but certainly worth a try.

Are there any pills people can pop to help?

Medications and the limits of drug-based relief

While over 4 million prescriptions are written every year in Europe and the U. S. for tinnitus relief, all are off-label prescriptions from a wide variety of drugs with uncertain efficacy.

Among the most prescribed medicines for tinnitus are anxiolytics, such as benzodiazepines, despite no robust evidence from clinical trials supporting their use.

Given tinnitus is a long-term condition, the use of short-term medication, like benzodiazepines, is unlikely to be the best option. No drugs have been approved by the U. S. FDA or European Medical Association specifically for treating tinnitus.

Guidelines are, by definition, conservative, as there is generally more evidence for established treatments than newer approaches. The clinical guidelines also had a long list of potential alternative treatments with "insufficient evidence to recommend for or against." What evidence do we have for alternative treatments?

I'll cover that next.