

What *Should* You Do *If You Have* TINNITUS?

Consult an audiologist who is knowledgeable about tinnitus to help develop your management program. Audiologists are trained professionals who can help diagnose and treat many of the problems associated with tinnitus. The American Academy of Audiology's website www.audiology.org contains a section for finding audiologists in your area.

Consult a physician, preferably an otolaryngologist (ear, nose, and throat specialist), to determine if your tinnitus is related to a condition that requires or is amenable to medical or surgical treatment.

Educate yourself about the nature of tinnitus and methods for managing and relieving your associated problems (anxiety, depression, sleep deprivation, etc.). The American Tinnitus Association (ATA) is an excellent source for information and lists of specialists.

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SAMPLE



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What is Tinnitus?

Tinnitus represents one of the most elusive mysteries facing audiologists and other hearing health care professionals. It refers to an auditory perception not directly produced by an external sound. Tinnitus is commonly described as a "hissing, roaring or ringing." It can range from high pitch to low pitch, consist of multiple tones or sound like noise (having no tonal quality at all). Tinnitus may be constant, pulsed or intermittent. It may begin suddenly, or may come on gradually. It can be perceived in one ear, both ears, or in the head.

Who has Tinnitus?

As many as 50 million adults experience tinnitus, with more than 10 million seeking help for the condition. Because tinnitus, like pain, is subjective, two individuals may report similar tinnitus characteristics yet be affected in significantly different ways. The severity of tinnitus and how it affects one's life is largely influenced by the individual's reaction to the tinnitus. Many tinnitus sufferers report interference with sleep, concentration, and attention to detail. Some are depressed and anxious and may report additional problems at work or at home that compound the distress caused by tinnitus. Many people with tinnitus also suffer from hyperacusis, an inability to tolerate even moderate level sounds. Most tinnitus patients report a relationship between tinnitus perception and stress. The onset of tinnitus often coincides with a change (emotional, physical or social) in one's life situation. Tinnitus has both a physiological and psychological component.

What causes Tinnitus?

The exact mechanism underlying tinnitus is unknown. It is likely that there are many mechanisms. Some of the potential causes are:

- Disorders in the *outer ear* such as: ear wax (cerumen), hair or a foreign body touching the eardrum;
- Disorders in the *middle ear* such as: vascular abnormalities, infection, otosclerosis, muscle spasms, Eustachian tube dysfunction, benign tumors;
- Disorders in the *inner ear* such as: sensorineural (nerve) damage due to noise exposure, presbycusis (hearing loss from aging), labyrinthitis (inner ear infection), Meniere's disease (associated with hearing loss and dizziness);

- Temporary effects of high dosages of medications such as anti-inflammatories (including aspirin, ibuprofen, and quinine), certain sedatives and antidepressants; possible permanent effects from certain antibiotics and chemotherapeutic agents;
- Systemic disorders such as high or low blood pressure, anemia, diabetes, thyroid dysfunction, glucose metabolism abnormalities, vascular disorders, acoustic tumors, head or neck aneurisms, hormonal changes;
- Trauma to the head or neck, cervical (neck) problems, temporomandibular (jaw joint) misalignment.

While the majority of tinnitus sufferers also have hearing loss, the presence of tinnitus does NOT necessarily mean that one is losing hearing.

What **TREATMENTS** are **AVAILABLE** for the **TINNITUS PATIENT?**

While there is no known cure for most forms of tinnitus, it is not true that “nothing can be done about it.”

Because tinnitus may be symptomatic of a treatable disease, it is important to try to identify and resolve a cause before deciding on the management approach.

A variety of tinnitus management procedures (listed below in alphabetical order) are available. None are universal cures, but most tinnitus sufferers can find varying degrees of relief from one or a combination of the following procedures:

COUNSELING

Counseling should be part of any treatment plan. There are many forms of counseling. Usually, a trained professional will attempt to help the patient deal with the stress, distress, and distraction associated with tinnitus. One form of counseling that is often employed is cognitive-behavioral therapy, a procedure that is also used for patients suffering from chronic pain. The objective of this approach is to help individuals identify and correct maladaptive behaviors and irrational beliefs that maintain their adverse reaction to the tinnitus.

HEARING AIDS

Amplification is among the most effective tools for providing relief from tinnitus. Hearing aids may help by amplifying background sounds that reduce the loudness of the

tinnitus or even mask it. In addition, they may help by relieving stress associated with the adverse impact of hearing loss on communication abilities.

MASKING

The use of an externally produced sound to either cover up, inhibit or alter production of tinnitus can offer temporary, partial or complete relief for some tinnitus sufferers. There are several methods of providing masking, including tinnitus maskers (ear level electronic sound-producing devices housed in a hearing aid case), tinnitus instruments (combination hearing aids and tinnitus maskers), tabletop bedside sound generators or hearing aids. CDs and tapes that provide various sounds also may help mask tinnitus. These can be used with either speakers or headphones.

MEDICATIONS

There is no single medication that works for all tinnitus patients. Some antidepressants and anti-anxiety medications address the problems associated with tinnitus and have proven helpful for certain patients. Always consult your physician concerning any drug or combination of medications you may be considering.

STRESS MANAGEMENT, RELAXATION AND BIOFEEDBACK

These are examples of various techniques used to help one cope with the stress of tinnitus. The close relationship between stress and tinnitus disturbance underscores the need to maintain one's composure and logic when trying to manage tinnitus.

SUPPORT/EDUCATION GROUPS

Groups offer a forum for sharing experiences and useful strategies with others. They may also offer emotional support to patients.

TINNITUS HABITUATION (RE-TRAINING)

This technique is based on the principles of neural plasticity (brain re-wiring). The two components of this method are directive counseling (education) and sound therapy. Some experts believe that a conditioned response is created within the central auditory nervous system, and that with proper counseling, education and understanding, the brain can relearn a pattern that removes the fear and de-emphasizes the importance of the tinnitus. For the sound therapy component, a wide band sound is presented via hearing aid type devices at a soft enough level that the brain perceives both the sound from the devices and the tinnitus. Eventually, the brain may relearn

a pattern that will de-emphasize the importance of the tinnitus.

ALTERNATE APPROACHES

There is no scientific data showing consistent benefit from approaches such as hypnosis, acupuncture, homeopathy, vitamin supplements or chiropractic manipulation, though anecdotal reports indicate benefit for some patients. It should be noted that the FDA does not monitor many of these substances, so caution should be exercised and your physician should be kept apprised of any substances you are using.

What can YOU DO to Minimize TINNITUS?

- Avoid loud noises
- Wear proper ear protection in high noise areas
- Control stress
- Avoid fatigue
- Learn to relax
- Maintain good nutrition; certain disorders may be helped by lowering salt intake
- Reduce or eliminate alcohol and stimulants such as caffeine
- Exercise
- Educate yourself about tinnitus