

Tinnitus:

An Auditory Processing Disorder

The sensation of ringing, buzzing or roaring sounds in the ear(s) or head when no external sounds are being made is called tinnitus. This condition may range from a temporary experience of a few seconds to being chronic. It may be intermittent or sustained. It may be in one ear, both ears, or the origin may not be understood by the patient. It may be loud or soft. It may bother the patient more during some times of the day, such as nighttime, more than others.^{1,2}

Testing for Tinnitus

Tinnitus often is a symptom caused by some underlying physiological problem. Therefore, the first initiative in helping a patient is to perform tests that will help determine the cause of the tinnitus. An examination is helpful to find possible underlying physical causes. There are many causes of tinnitus. Wax in a person's ear, blood pressure, medications, allergies, noise exposure, disease of the auditory system, and cardiovascular abnormalities are a few possible reasons why tinnitus may be experienced. It is common for the patient's physician and audiologist to collaborate testing and managing a patient with tinnitus.^{1,2}

An audiologist is an important part of the testing process. The audiologist administers a set of basic and advanced ear and hearing tests to determine if the auditory system

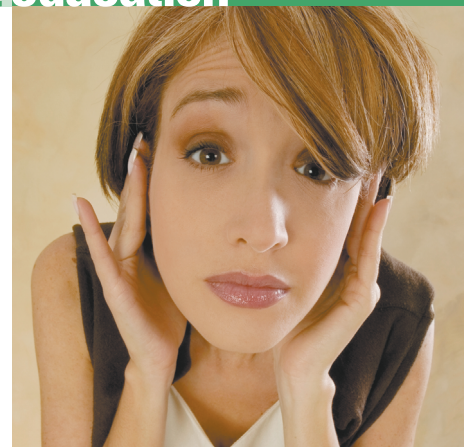
is functioning normally. Additionally, the audiologist typically asks a series of questions about ear involvement, type of sounds heard, when the sounds are most prevalent, sound pitch, sound volume, consistency of the sound, etc.

Treating Tinnitus

Following medical and audiological examinations, tinnitus treatment may take one of several forms. Physical abnormalities are treated medically or surgically; sometimes effective treatment may require both. Unfortunately, many of the causes of tinnitus are not resolved medically or surgically because the reason for the tinnitus is not known. Abnormalities that are not medically or surgically treatable typically are managed by an audiologist.^{1,2}

A variety of therapies have been used to treat tinnitus, including drug therapy, counseling and tinnitus maskers. Combinations of treatments are sometimes used. What works for one patient may not necessarily work for another patient.

Tinnitus maskers have had reasonable success with many patients. These devices look like hearing aids, but they work by emitting sound into the ear. The purpose of the tinnitus masker is to help cover up the patient's perception of tinnitus or to distract attention from it. For tinnitus patients who also have hearing loss, a hearing aid and tinnitus masker are sometimes combined into one unit that provides both amplification and masking to help cover up the patient's tinnitus.



Because tinnitus frequently is reported as more annoying at night when there are fewer surrounding noises and patients may be trying to sleep, audiologists sometimes may recommend sound-producing systems that are placed beside a patient's bed. The sounds from the device help to cover up or distract the patient's perception of the annoying tinnitus.

Some patients also benefit from counseling therapy, auditory rehabilitation therapy or a combination of both. Counseling therapy frequently focuses on treatment of emotional distress that may be the result of the effects of experiencing tinnitus. Auditory rehabilitation therapy focuses on how to maximize listening techniques in the presence of tinnitus to optimize what the patient hears.

Team Approach

Tinnitus can be a disabling condition. The purpose of recognizing, diagnosing and treating tinnitus is to improve the quality of a patient's life. Effective treatment frequently involves the patient, a physician and an audiologist. Fortunately, a systematic team approach can often improve the quality of life for patients who seek and receive professional help. 💰

REFERENCES:

1. American Speech Language Hearing Association, accessed online at www.asha.org/public/hearing/treatment/tinnitus_manage.htm
2. Oregon Health and Science University, accessed online at www.ohsu.edu/ohrc/tinnitus-clinic.

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FOR MORE INFORMATION:

- **American Academy of Audiology**
www.howsyourhearing.org/tinnitus.html
- **American Tinnitus Association**
www.ata.org
- **Better Hearing Institute**
www.betterhearing.org/tinnitus/index.cfm
- **National Institute on Deafness and Other Communications Disorders**
www.nidcd.nih.gov/health/hearing/noiseinear.asp
- **Tinnitus Practitioners Association**
www.tinnituspractitioners.com/understanding_tinnitus.html