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Tinnitus

Tinnitus (pronounced *TINN-i-tis* or *ti-NIGHT-is*) is the perception of sound – ringing, hissing, buzzing, clicking, whistling, swooshing, or (rarely) music when no external sound is present.

The most common cause of tinnitus is hearing loss (often noise-induced hearing loss). Other causes include, but are not limited to, ototoxic drugs, head or neck injury, stress, Temporomandibular Joint Disorder, ear wax, and sudden exposure to loud damaging noise (ie. firearms, firecrackers, loud music). Medical conditions such as diabetes, high blood pressure, and thyroid problems can also cause tinnitus.

Facts about tinnitus:

- An estimated 15% of the general population (over 50 million Americans) experience tinnitus according to the US Center for Disease Control.
- Approximately 2 million people have severe and debilitating tinnitus.
- 80% of people who experience tinnitus have some degree of hearing loss
- Tinnitus can be temporary or long-standing.
- There is presently no cure for tinnitus. Treatment options focus on management of the condition.
- There are currently no FDA approved drugs to specifically treat tinnitus.

Tinnitus can impact a person in a number of ways: anxiety, difficulty concentrating, depression, irritability, sleep disturbances, and distress.

What should you do if you have tinnitus?

See an otolaryngologist (ENT physician) to rule out any underlying medical conditions that might be contributing to your tinnitus.

See an audiologist for a hearing evaluation. Results of your hearing evaluation can be helpful in determining appropriate treatment and management options.

Tinnitus can be bothersome and disturbing because our brain interprets the unwanted sound as a threat. For example, if you hear a noise in the middle of the night your brain alerts you in case you need to take action. Once you realize the sound is the wind outdoors causing a branch to bump up against your window, you are likely to become less bothered by it. This can become a cycle that is difficult to break: the more attention a person pays to the tinnitus the more they notice it and the worse it becomes. The various treatment and management options listed below aim to make the tinnitus less noticeable by learning strategies to lessen your focus on it.

Management/Treatment Options

Hearing aids: Properly fitted hearing aids can provide dual benefit in the management of hearing loss as well as tinnitus. In some cases, the use of hearing aids can make a person less aware of their tinnitus because of the amplification of environmental and speech sound from their hearing aids. Most hearing aids have specific tinnitus features to help reduce the awareness of tinnitus. Care should be taken with masking noise. If not set appropriately it can cause the tinnitus to become more bothersome.

Ambient noise in your bedroom: Tinnitus can be especially bothersome at night when it is quiet in the environment. A fan or sound machine can be used to generate ambient noise to help distract you from the tinnitus while trying to fall asleep. Maskers that are worn or incorporated into a pillow can be purchased which make low volume background noise if your sleeping partner does not like having noise in the environment.

Tinnitus Retraining Therapy (TRT): Involves retraining how our brain perceives tinnitus so that although it is still present it is no longer bothersome or irritating. TRT includes counseling and the use of a wearable device that emits low-level sounds. Time involved can be 1-2 years using the device.

Progressive Tinnitus Management (PTM): Used in the VA system. It encompasses five levels of treatment. Not everyone will need to go through all five levels. As the levels progress, therapy gets more intensive. Patients needing higher levels of care might use sound generators and cognitive behavioral therapy.

Neuromonics: Treatment involves listening to an acoustic signal that is customized for each person. The acoustic signal is embedded in music, making it pleasant and relaxing. The signal targets the brain's neural pathways and "re-programs" them to filter out the tinnitus while reducing its impact on your quality of life. Time involved can be 6 months or longer.

Cognitive Behavioral Therapy (CBT): Therapy from a psychology professional to teach strategies to manage the psychological response to tinnitus, including coping and relaxation strategies.

Biofeedback and stress reduction: Teaches relaxation techniques on how to control breathing and heart rate, thereby changing your reaction to your tinnitus

Tinnitus Activities Treatment (TAT): Involves using carefully controlled sound therapy from hearing aids and counseling on the related effect of tinnitus on the person's emotions, sleep, and concentration.

Mindfulness and Meditation: may reduce the stress and anxiety associated with tinnitus. Many smartphone apps exist for the purpose of stress reduction. See below for a list of smartphone apps.

Lifestyle and health habits: Reducing your intake of caffeine and alcohol, trying to get enough sleep and exercise, and trying to reduce everyday stress can be helpful in tinnitus management.

Online tinnitus treatment courses:

- Mindfulness Based Tinnitus Stress Reduction www.mindfulnessstinnitusrelief.com
- 8-week internet based course, weekly 2 hour class plus daily (30-40 minutes) home practice
- CBT for Tinnitus www.cbtfortinnitus.com
- Virtual meetings are held weekly at first, then gradually scaled back as your confidence in handling tinnitus grows. Once you have your program set, brief coaching sessions are available to keep you on track.
- CBT for Tinnitus offers a 90-minute webinar to explore the program

Smart Phone Apps: Many smart phone apps are available that can help with stress reduction, relaxation and providing soothing sounds.

- EarMachine
- Headspace: Meditation and Sleep
- ReSound Relief
- Starkey Relax
- Relax Melodies
- Calm
- Whist – tinnitus relief