# Treatment Information (from ATA.org website)

Treatments are presented alphabetically, not in recommended order. When trying any new treatmremember that many therapies require an investment of time and personal effort to be effective. Also, some patients find that a combination of treatments\* is more effective than a single therapy.

\*Note: ATA does not endorse or recommend any tinnitus treatment.

#### **Alternative Treatments**

Some people have taken minerals such as magnesium or zinc, herbal preparations such as Ginkgo biloba, homeopathic remedies, or B vitamins for their tinnitus and found them to be helpful. Others have experienced tinnitus relief with acupuncture, cranio-sacral therapy, magnets, hyperbaric oxygen, or hypnosis. A few of these therapies have been researched in an attempt to verify the anecdotal claims. But the results have not conclusively identified these treatments as helpful for tinnitus. Your doctor might give you clearance to try them for tinnitus anyway given that they generally carry little risk to health and some people find them helpful.

### Amplification (Hearing Aids)

Some tinnitus patients with hearing loss experience total or partial tinnitus relief while wearing hearing aids. There are many variables that determine success. However, if a patient has a hearing loss in the frequency range of the tinnitus, hearing aids may bring back in the ambient sounds that naturally cover the tinnitus.

#### Biofeedback

Biofeedback is a relaxation technique that teaches people to control certain autonomic body functions, such as pulse, muscle tension, and skin temperature. The goal of biofeedback is to help people manage stress in their lives not by reducing the stress but by changing the body's reaction to it. Many people notice a reduction in their tinnitus when they are able to modify their reaction to the stress in their lives.

# Cochlear Implants/Electrical Stimulation

A cochlear implant has two components: 1) an electrode array that is threaded into the cochlea, and 2) a receiver that is implanted just beneath the skin behind the ear. The electrode array sends electrical sound signals from the ear to the brain. Because electrode implantation destroys whatever healthy hair cells were left inside the cochlea, these implants are prescribed to deaf or near-deaf patients only. In one study, half of those who had tinnitus before their cochlear implants experienced tinnitus relief after their cochlear implants.

Why do cochlear implants help tinnitus? There are two possible reasons: 1) The tinnitus might be masked by the ambient sounds that these devices bring back in. 2) The tinnitus might be suppressed by the electrical stimulation sent through the auditory nerve by the implant. Some forms of electrical stimulation to the ear can stop tinnitus briefly.

### Cognitive Therapy

Cognitive therapy is a type of counseling that is based on treating a patient's emotional reaction to tinnitus rather than the tinnitus itself. To accomplish this desired change in perception, a counselor will help the patient identify negative behaviors and thought patterns, then alter them. Counseling programs are individually designed for patients and are most effective when coupled with other tinnitus treatments, such as masking or medication.

### **Drug Therapy**

Many drugs have been researched and used to relieve tinnitus, but there is not a drug that has been designed specifically to treat tinnitus. Some drugs that have been studied include antianxiety drugs like Xanax, antidepressants like nortriptyline, antihistamines, anticonvulsants like gabapentin, and even anesthetics like lidocaine. All successfully quieted tinnitus for some people.

The American Tinnitus Association cannot recommend which treatment, drug or otherwise, is right for you. This is for you and your health care provider to determine. Remember to talk to your provider about side effects and about other medications you currently take. Because side effects can happen with any drug or drug combination, patients have to decide for themselves if an undesirable side effect is worth the trade off of tinnitus relief.

### **Sound Therapy**

Various treatment strategies use sound to decrease the loudness or prominence of tinnitus. Sound therapies include both wearable (hearing aid-like devices) and non-wearable devices (such as table-top sound machines or even a whirring fan). Often, sound is used to completely or partially cover the tinnitus. Some people refer to this covering of sound as masking. Sound therapies should always be combined with counseling.

#### **TMJ Treatment**

Tinnitus can be a symptom of a jaw joint (temporomandibular joint, or TMJ) dysfunction. This can happen because muscles and nerves in the jaw are closely connected to those in the ear and, under the right circumstances, can interfere with the ear's nerves. Dental treatment or bite realignment can help relieve TMJ pain and associated tinnitus. See your dentist if you think you have this problem.

**Tinnitus Rx Information** 

The American Tinnitus Association is pleased to share several avenues where tinnitus patients can learn more about medications and tinnitus. Some prescription and over-the-counter drugs can affect/worsen existing tinnitus or, in some cases, cause tinnitus as a side effect. Before you consider any change in your medication(s) or treatment strategy, consult with your personal physician. Ask questions, and be sure to mention other medications, supplements and vitamins you currently take.

# PDR and Center for Hearing and Communication Ototoxic Drug Listings

The publisher of The Physicians Desk Reference (PDR) has a list of medications (prescription and over-the-counter drugs) that list tinnitus as a potential side effect. While this list does not detail information about drugs tested specifically on tinnitus patients, it can be a helpful guide when making health care decisions. ATA does not have copyright permission to make this information available over the Internet. You may wish to visit the PDRhealth website for general drug information. For your free copy of the "2010 PDR Guide to Drug Interactions, Side Effects, And Indications for Tinnitus," please e-mail tinnitus@ata.org.

The Center for Hearing and Communication (formerly known as League for the Hard of Hearing) maintains a listing of drugs that may be harmful to hearing health or exacerbate the negative effects of tinnitus. They have a website where you can get information on medications that may cause hearing loss and tinnitus.

#### FDA Website

The U.S. Food and Drug Administration also hosts several websites featuring information about various medications. You can do a search on individual drugs and drugs new to the market through the two links below. The site also has a <u>feature</u> with suggestions of questions to ask your doctor. As someone with tinnitus, you should always ask how any medication prescribed to you may impact your tinnitus and hearing.

FDA Consumer Info

FDA Drug Info Links

### **FDA Drug Line**

All people with questions about tinnitus and medications can contact the U.S. Food and Drug Administration's drug line at (301) 827-4570. Receive up-to-date information about drug side effects and interactions from pharmacists and medical professionals 8:30 a.m. to 4:30 p.m. Eastern time. If you do not reach someone at this number right away, leave a voice message and expect a return call within 48 hours.

#### **NIH** Website

The National Institute of Health also has a <u>website</u> where you can get information on thousands of prescription and over-the-counter generic or name brand medications.

# **DrugWatch Website**

Up-to-date <u>information about prescriptions</u> and over-the-counter medications and includes details about associated side effects to aid in the protection of patients and consumers. The content on the site may help consumers formulate questions for medical professionals and alert the public about important information regarding potentially dangerous side effects associated with certain medications.