AAO-HNSF Updated Clinical Practice Guideline: Tinnitus

“Tinnitus affects 10-15% of adults in the United States. It is the most common service-related disability among our military veterans. Yet despite its prevalence and effect on quality of life, prior to this there weren’t any evidence-based guidelines about managing tinnitus. This guideline gives healthcare providers a framework for care and support in mitigating the personal and social impact that tinnitus can have.”

— Sujana S. Chandrasekhar, MD, guideline co-author

What is tinnitus?

- Tinnitus is the perception of sound without an external sound source. Tinnitus is most often described as ringing, buzzing, clicking or pulsating noise perceived only by the patient.
- Primary tinnitus has no known cause and usually is associated with hearing loss. Secondary tinnitus is associated with a specific cause with hearing loss as an associated symptom.
- Persistent tinnitus is six months or longer in duration.
- Bothersome tinnitus distresses patients and affects quality of life and/or functional health status. Tinnitus that does not have a significant effect on a patient’s daily life is considered nonbothersome.

Why is the tinnitus guideline important?

- This is the first evidence-based clinical practice guideline developed for the evaluation and treatment of chronic tinnitus.
- The focus of this guideline is on tinnitus that is both bothersome and persistent (lasting six months or longer), which often negatively affects the patient’s quality of life.
- More than 50 million people in the United States have reported experiencing tinnitus, resulting in an estimated prevalence of 10% to 15% in adults. About 20% of adults who experience tinnitus will require clinical intervention.
- Tinnitus is the most frequent service-connected disability for U.S. military veterans, with nearly 1 million veterans receiving disability payments for tinnitus in 2012. By 2016, more than 1.5 million U.S. veterans are expected to receive compensation for tinnitus-related claims.
- Tinnitus can have a significant effect on quality of life. The association of major depression and tinnitus has been studied, with depression reported in 48% to 60% of tinnitus sufferers.

What is the purpose of the tinnitus guideline?

- Since tinnitus patients are often evaluated by a variety of healthcare providers, the target audience for this guideline is any clinician, including non-physicians, involved with tinnitus management. The guideline’s recommendations are made by experienced clinicians and methodologists, according to the best scientific evidence.
- The guideline was developed by a panel including representatives for otolaryngologists, geriatricians, primary care physicians, nurses, psychiatrists, behavioral neuroscientists, neurologists, radiologists, audiologists, psychoacousticians, and tinnitus patients, to improve patient care and provide an assessment of the benefits and harms of different tinnitus treatment options.
What are significant points made in the guideline?

1. **History and Physical Exam** – Clinicians should perform a targeted history and physical exam during the first evaluation of a patient with tinnitus.

2. **Hearing Exams**
   
   A. A comprehensive hearing exam should be performed promptly on patients who have had tinnitus in one ear, tinnitus that is in both ears for 6 months or longer, or patients who report difficulty hearing.
   
   B. A comprehensive hearing exam may be performed during the first evaluation of a patient with tinnitus in one or both ears regardless of duration or hearing status.

3. **Imaging Studies** – Given the risks of radiation exposure, imaging studies should only be performed if a patient has one or more of the following: pulsating tinnitus, focal neurological abnormalities, tinnitus in one ear only or asymmetric hearing loss.

4. **Bothersome Tinnitus** – Not all tinnitus is bothersome. Clinicians must distinguish if a patient considers his or her tinnitus bothersome or not.

5. **Persistent Tinnitus** – To identify the best care options, clinicians should distinguish if a patient has bothersome tinnitus of recent onset or persistent tinnitus that has lasted 6 months or longer.

6. **Education and Counseling** – Clinicians should educate patients with persistent, bothersome tinnitus about management strategies.

7. **Hearing Aid Evaluation** – Clinicians should recommend hearing aid testing for patients with hearing loss and persistent, bothersome tinnitus.

8. **Sound Therapy** – Clinicians may offer sound therapy to patients with persistent, bothersome tinnitus.

9. **Cognitive Behavior Therapy** – Clinicians should recommend cognitive behavior therapy to patients with persistent, bothersome tinnitus.

10. **Medical Therapy** – Clinicians should NOT routinely prescribe antidepressants, anticonvulsants, anxiolytics, or intratympanic medications for a primary indication of treating persistent, bothersome tinnitus.

11. **Dietary Supplements** – Clinicians should NOT recommend ginkgo biloba, melatonin, zinc, or other dietary supplements for treating patients with persistent, bothersome tinnitus.

12. **Acupuncture** – No recommendation can be made about acupuncture for treating patients with persistent, bothersome tinnitus.

13. **Transcranial Magnetic Stimulation** – Clinicians should NOT recommend transcranial magnetic stimulation for treating patients with persistent, bothersome tinnitus.

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**About the AAO-HNS/F**

The American Academy of Otolaryngology—Head and Neck Surgery (www.entnet.org), one of the oldest medical associations in the nation, represents about 12,000 physicians and allied health professionals who specialize in the diagnosis and treatment of disorders of the ears, nose, throat, and related structures of the head and neck. The Academy serves its members by facilitating the advancement of the science and art of medicine related to otolaryngology and by representing the specialty in governmental and socioeconomic issues. The AAO-HNS Foundation works to advance the art, science, and ethical practice of otolaryngology-head and neck surgery through education, research, and lifelong learning. The organization's vision: “Empowering otolaryngologist-head and neck surgeons to deliver the best patient care.”