



The Intake Process for People with Tinnitus

Simple tools can help make you a better clinician for patients with tinnitus

By John A. Coverstone, AuD and
Gail M. Whitelaw, PhD

Patients and providers alike know that one of the most important encounters for someone experiencing tinnitus is the first time he or she mentions it to a health care provider. The intake professional could be a primary care physician, ENT, audiologist, psychologist, or other provider. Regardless of the type, it is the way a provider receives and acknowledges a patient's first report of tinnitus that is crucial to the process of directing treatment and addressing the other conditions that often are associated with it.

Far too many patients hear, "There is nothing that can be done," at this

initial intake, even though there are numerous options available to help people with tinnitus and associated conditions. As one would surmise, this response — rather than providing help — may actually contribute to a patient reacting to tinnitus with depression, anxiety, or even despair.

Providers can change that scenario and turn it into a positive experience simply by asking a few basic questions. In addition to making a better experience for the patient, these questions allow the provider to determine the most appropriate referrals and ensure that all individuals with tinnitus receive the help they need in an efficient, effective, and empathetic manner.

One excellent source for basic tinnitus education is the British Tinnitus Association's *Guidance for General Practitioners*, which was reprinted in the Spring 2017 issue of *Tinnitus Today*. This guidance serves as a starting point to quickly educate primary care physicians about the nature of tinnitus and helps them understand that there are many things that can help tinnitus patients.

In this article, we outline ways to assess a patient's condition quickly and determine the most appropriate referrals based on those findings. These tools may be used by any physician, audiologist, psychologist, or other provider who encounters patients with acute tinnitus.

Tinnitus presents itself in several common ways across the population of those who experience it. Understanding these symptoms will help you offer better care and ensure you make appropriate referrals to professionals who can diagnose and treat tinnitus or the conditions that cause it.

Pulsatile Tinnitus

Many patients report that they hear a pulsing tinnitus, which may be described as rhythmic, pulsing, thumping, whooshing, or following their heartbeat. This is referred to as pulsatile tinnitus, and its rhythm frequently is timed to the patient's heartbeat. This condition results from abnormalities with blood flow resulting from atherosclerosis, hyperthyroidism, increased localized blood flow resulting from tumors of the head or neck, or even conductive hearing loss. Pulsatile tinnitus also may result from idiopathic intracranial hypertension, which additionally includes visual disturbances and headaches. Providers whose patients report pulsatile tinnitus should refer the patient to a primary care physician or otologist for evaluation of blood flow.

Temporomandibular Joint Disorder

Some patients experiencing what is commonly referred to as "TMJ," also will report tinnitus. These patients often report clicking, roaring, hissing, or buzzing, although other sounds may be experienced. These sounds may be accompanied by jaw pain, worsening or relief with jaw movement, or recurrent headaches. If a patient reporting

tinnitus has a history of recent dental work or complains of jaw pain or other conditions that suggest possible TMJ disorder/dysfunction, a provider should refer him or her to a dental or orthodontic specialist for evaluation.

Traumatic Brain Injury

Tinnitus frequently occurs with traumatic brain injury (TBI) and may be an indication of a more severe injury than initially reported. Patients who have experienced a recent head injury and report tinnitus should receive a full TBI exam by an appropriate physician. In these cases, tinnitus may persist regardless of other treatments, so additional referrals listed in this guide may be necessary. Patients diagnosed with TBI, who report tinnitus, should be referred to an audiologist who can perform a tinnitus evaluation and/or auditory processing assessment.

Post-Traumatic Stress Disorder

PTSD may occur in concert with traumatic injury or may result from distinct events. In either case, patients with tinnitus who also show signs of — or have been diagnosed with — PTSD are at high risk for psychological disorders, including depression or anxiety disorders. These patients should be referred to a psychologist or a psychiatrist, as appropriate, for cognitive behavioral therapy and other intervention as necessary.

Depression and Other Mental Health Issues

Some patients with tinnitus also may report depression, intentions of harming themselves, or other related signs of depression or mental health problems. Obviously, such patients should be

immediately referred to a mental health professional. Tinnitus is known to exacerbate or possibly even cause onset of clinical-level depression and anxiety disorders. Therefore, providers should have all patients who report severe tinnitus complete a tinnitus questionnaire, such as the *Tinnitus Reaction Questionnaire (TRQ)* or *Tinnitus Handicap Inventory (THI)*. A patient with tinnitus who exhibits clinical-level mental health disorders should be referred to a mental health specialist knowledgeable in cognitive behavioral therapy.

Unilateral Tinnitus or Tinnitus Ipsilateral to Head/Neck Mass

Many otologic and neuro-otologic conditions have the potential to cause tinnitus. Many of these result in unilateral tinnitus, rather than bilateral tinnitus that often is associated with hearing loss, noise exposure, ototoxicity, head trauma, and other causes. Unilateral tinnitus may be caused by a more benign condition, such as unilateral hearing loss. On the other hand, it also could result from a more serious and acute condition, such as a vestibular schwannoma, a labyrinthine condition, such as Meniere's disease, or a condition of the middle ear, such as otosclerosis or otitis media. When a patient presents with unilateral tinnitus, providers should make a referral for examination by an ENT.

Tinnitus Onset Following Flying/Diving

Patients reporting tinnitus onset closely following an episode of flying, diving, or other activity with rapid changes in air pressure may be experiencing the effects of middle ear pathology,

sinus problems, or ear barotrauma. In all cases, referral to an otologist and audiologist is recommended for complete evaluation of these symptoms.

Tinnitus Related Hearing Loss

The most common etiology for tinnitus is believed to be hearing loss. Therefore, patients reporting tinnitus should be screened for hearing loss. This screening may be as simple as asking whether patients have difficulty understanding conversation with background noise present, whether they turn up the television (spouses are more than happy to report this), notice that they are straining to hear what is being said, or do not understand everything being said in a conversation. Pure tone hearing screenings or screening questionnaires, such as the *Hearing Handicap Inventory for Adults (HHIA)*, also can be employed. Any tinnitus patient identified as having possible hearing loss should be referred for a comprehensive audiologic evaluation performed by an audiologist.

Sleep Disorders/Lack of Sleep from Tinnitus

Most providers who serve patients with tinnitus agree that sleep is a fundamental component of overcoming its effects. If a patient with tinnitus is not getting sufficient sleep, tinnitus may worsen, and its effects may be perceived as more severe. If a patient is having mild difficulty sleeping due only to the tinnitus, an audiologist typically can provide help through sound therapy. If sleep problems involve non-tinnitus causes or the patient is suffering from severe sleep deprivation and sound therapy is insufficient to allow normal sleep, it may be appropriate to prescribe

medication (on a short-term basis) for sleep, refer the patient for a sleep study, or refer him or her to a mental health specialist for cognitive behavioral therapy. If these referrals do not help the patient manage sleep issues, a combination of treatments may be in order.

Tinnitus with Sound Tolerance Problems

Some people with tinnitus and a larger number with bothersome tinnitus also may have sound tolerance problems. This occurs when someone has an adverse reaction (sometimes severe) to sounds at levels typically considered very tolerable. It is important to identify this condition and avoid probes that create loud sounds (for audiologists, in particular). Materials such as the *Tinnitus Reaction Questionnaire* help determine whether a patient has sound tolerance problems. Referral to an audiologist who specializes in tinnitus and related disorders is indicated in these instances. Referral to a psychologist also may be necessary and may be done in consultation with the audiologist. It is critical that those working with patients who have sound sensitivity issues, sometimes referred to as hyperacusis, have knowledge and experience with this population.

Tinnitus Without Evident Etiology or Comorbidity

Some people experience tinnitus without other conditions present, so the need to refer often is based on the patient's perceived need for help. However, it is recommended that any patient who experiences tinnitus and is seeking help be referred to an audiologist specializing in tinnitus so that examination and consultation

may be performed. Hearing loss may be present, but not mentioned or perceived. Another potential cause may be uncovered by the audiologist. If other intervention is not indicated, the audiologist will advise the patient about effective methods for treating tinnitus in everyday life.

Given the fact that more than 50 million Americans experience tinnitus at some point in their lifetimes, it is likely that nearly every primary care physician, ENT, audiologist, psychologist, psychiatrist, physician assistant, and nurse practitioner will encounter one or more patients with tinnitus. Knowing the information provided — along with the accompanying flowchart and a questionnaire, such as the *Tinnitus Reaction Questionnaire (TRQ)* or the *Tinnitus Handicap Inventory (THI)* — will be invaluable in helping respond appropriately and effectively to those patients who are seeking help with tinnitus. Keep these tools close by for quick reference.

With a basic understanding of tinnitus, as well as these simple guidelines and tools, any primary care provider can help patients with tinnitus. Instead of “Nothing can be done,” your answer can and should be “Something can be done — let me help you.” 

John A. Coverstone, AuD, is a clinical audiologist, Audiology Ear Care, New Brighton, MN

Gail M. Whitelaw, PhD, is an audiologist and clinic director, The Ohio State University Speech-Language-Hearing Clinic, Columbus, OH

- 1 Baracca, G., delBo, L., and Amborsetti, U. (2011). Tinnitus and Hearing Loss. In Møller, A.G., Langguth, B., DeRidder, D., and Kéliniung, T. (Eds.), *Textbook of Hearing Loss*. New York: Springer.
- 2 Goodey, R. (2007). Tinnitus Treatment—State of the Art. *Progress in Brain Research*, 166, 237-246.
- 3 Nagler, S.M. (2003). Tinnitus. A Patient's Perspective. *Otolaryngology Clinics of North America*. 36(2):235-8.