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Level 1 Triage



This and the remaining chapters focus on describing detailed procedures for conducting PTM. The present chapter describes procedures for “triaging” patients when they complain of tinnitus at any clinic. Patients report tinnitus to healthcare providers in many different clinics—not just otolaryngology and audiology. Direct points of contact include primary care, psychology, psychiatry, neurology, and oncology. Providers in these (and other) departments may be unaware of clinical resources that are available when patients complain of tinnitus. Guidelines are needed so that clinicians can refer these patients to receive appropriate care.

A guide (Tinnitus Triage Guidelines—Appendix B) has been developed to provide to clinicians as a resource to know how to appropriately refer their patients who complain of tinnitus. The evidence for these guidelines is based on best practices for referring these patients (Harrop-Griffiths et al., 1987; J. A. Henry, Zaugg, et al., 2005a; J. L. Henry & P. H. Wilson, 2001; Wackym & Friedland, 2004). Audiologists see patients in any of PTM Levels 2 to 5, and more comprehensive referral guidelines have been developed for audiologists to use in these levels (J. A. Henry et al., 2008b). Reactions

to tinnitus often are best managed using an interdisciplinary approach, thus proper referral and inclusion of a psychologist and otolaryngologist on the “tinnitus team” (when possible) are critical components of PTM.

When a patient complains of tinnitus, the primary concerns are to determine (in order of decreasing priority) if the patient: (a) has a serious medical condition (physical or mental) requiring immediate medical attention; (b) experiences symptoms of a nonurgent medical condition indicating the need for a medical examination; (c) experiences symptoms of a nonurgent psychological condition indicating the need for mental health screening; and (d) has been referred or has none of the symptoms listed above, indicating the current need for an audiologic examination.

Tinnitus Triage Guidelines

The Tinnitus Triage Guidelines (Appendix B) can be used by providers as a quick guide for triaging patients who complain of tinnitus. Following these

guidelines should result in appropriate care in most cases. It needs to be emphasized, however, that the guidelines are greatly simplified for clinical expediency. It goes without saying that clinicians must use their clinical judgment to determine the best course of action for each patient. Another caveat is that clinical services for tinnitus are far from being standardized. Clinicians who provide tinnitus services often use very different approaches. Patients who are referred should be advised to become well informed before agreeing to undergo any medical procedure or to enroll in any therapeutic program.

PTM Level 1 Triage shown in the PTM Flowchart (Appendix A) includes a large rectangular text box that lists the basic criteria for referring patients who complain of tinnitus. Depending on the patient's symptoms and other diagnostic factors, there are four possible referrals (as indicated by the four columns in the text box), which are described below. The Tinnitus Triage Guidelines (Appendix B) is an information sheet that can be distributed to providers as a quick guide for triaging their patients who complain about tinnitus. The guidelines can be distributed to clinics that are likely to encounter these patients. The PTM Flowchart (Appendix A) can be printed on the back side of the guidelines (Appendix B) to provide a single sheet with the essential triage/referral information.

Emergency Triage—Urgent Care or Otolaryngology

Idiopathic sudden sensorineural hearing loss (ISSHL) or facial palsy indicates an urgent need to be seen by otolaryngology or urgent care. ISSHL has been defined as hearing loss of at least 20 dB across three adjacent audiometric test frequencies (Battaglia, Burchette, & Cueva, 2008). However, at the time of initial report, patients usually do not have the results of an audiogram. Thus, if the patient reports an unexplained decrease in hearing sensitivity, then ISSHL should be suspected. The loss typically occurs over the course of three days or less and has no clear precipitating cause.

Although the etiology of ISSHL is unknown, possible causes include labyrinthitis (viral or bacterial), vascular disruption, labyrinthine membrane

ruptures, immune-mediated mechanisms, abnormal cellular stress responses within the cochlea, and ion transport problems of the stria vascularis (Merchant, Adams, & Nadol, 2005; Trune, 2004). If left untreated, the hearing loss will resolve partially or completely in at least 50% of these patients. This recovery rate may be improved with corticosteroid (glucocorticoid) treatments, particularly if delivered intratympanically (Hamid & Trune, 2008). Although recovery with glucocorticoids often is interpreted as an underlying cochlear inflammation etiology, numerous inner ear ion homeostasis mechanisms also are controlled by corticosteroids (Merchant et al., 2005; Trune, 2004). Thus, conclusions about etiology based on treatment response can be debated, although lack of recovery with glucocorticoids indicates that other treatment options should be pursued.

ISSHL has been referred to as an “otologic emergency” (Goodhill & Harris, 1979). Failure to refer a patient with ISSHL for same-day ENT or urgent care can jeopardize the patient's chances of recovering hearing function. The time course from the onset of symptoms until the initiation of corticosteroid therapy can be a factor in the chances of recovery—the more expediently these patients are seen, the better their prognosis (Jeyakumar, Francis, & Doerr, 2006).

Triage Patient to Mental Health

Some patients require mental health assessment, either because of obvious manifestations of mental health problems or because of expressed suicidal or homicidal ideation. If there is a question about the patient's mental health, then screening tools are available to assist in determining the need for referral (J. A. Henry et al., 2008b). Some patients experience extreme anxiety or depression in reaction to tinnitus and should be referred to a mental health provider the same day symptoms are reported—although this would not be an emergency referral. Suicidal or homicidal ideation warrants special attention, and referral guidelines are available for these patients (G. K. Brown, Henriques, Sosdjan, & Beck, 2004; Hawton, 2001; Kessler, Borges, & Walters, 1999).

In preparation for possible referrals, it is best to establish a relationship with local emergency mental health providers, such as the nearest emergency room, in-house security personnel, or on-call mental health providers. Many sites now have a suicide coordinator. Such mental health providers possess the skills and resources for assessing and responding to a patient's risk of suicide or violence.

Triage Patient to Otolaryngology

Health care providers should refer patients to otolaryngology if certain symptoms coexist with the tinnitus. Patients require a medical examination and a hearing assessment if their symptoms suggest a somatic origin of tinnitus (e.g., pulsatile tinnitus), or if there is ear pain, drainage, or malodor. (Please see Chapters 1 and 5 for information about somatosounds.) Vestibular symptoms also require referral to otolaryngology. The urgency of these referrals is determined by the clinician. Referral to audiology also is indicated in these cases—ideally, patients should see an audiologist first so that audiologic test results are available to the otolaryngologist.

Triage Patient to Audiology

Patients complaining of tinnitus should be referred to audiology if symptoms suggest that a medical examination is not necessary. These patients require a hearing assessment by an audiologist in addition to a brief assessment of the severity of the tinnitus (see Chapter 5) (J. A. Henry et al., 2008b). Triaging patients to audiology requires: (a) symptoms suggest a neurophysiologic (not somatic) origin of tinnitus; (b) no ear pain, drainage, or malodor; (c) no vestibular symptoms; (d) no physical trauma, facial palsy, or ISSHL; and (e) no obvious mental health symptoms or suicidal ideation.

It is important to refer patients to audiologists who have expertise in tinnitus management. These audiologists have the ability to implement several different options for intervention, including use of ear-level devices (hearing aids, “maskers,” and combination instruments), educational therapies, and specific sound-based methods of intervention.

These audiologists also generally work within a network of providers who specialize in tinnitus. Access to such a network is important to the patient.

It commonly is reported that many patients with tinnitus also suffer from a loudness tolerance problem (usually referred to generically as “hyperacusis”—see Chapter 1 for related definitions). In reality, most patients suspected as “hyperacusic” do not require intervention specific to loudness tolerance. Treatment for the condition generally requires a program of systematic exposure to sound, which is accomplished when implementing sound therapy for tinnitus. For patients with a severe hyperacusis problem, specific therapeutic programs are available (J. A. Henry, Trune, et al., 2007a). Chapter 6 describes the program that is used with PTM for patients who have a severe loudness tolerance problem.

Summary

Patients complain of tinnitus in many different clinics. However, most providers do not know what to tell these patients, nor do they know how to refer them most appropriately. Normally, a referral to audiology is appropriate. However, there are symptoms that suggest urgent or other care is required. We have explained those symptoms and provided the Tinnitus Triage Guidelines (Appendix B), which can be distributed to any clinic that would be the point of contact for patients who complain about tinnitus. These guidelines are appropriate for the majority of patients who complain of tinnitus, but they do not address all patients. It was noted above that the clinician is the final arbiter of any decision to refer a patient.

Different methods for managing reactions to tinnitus can be beneficial to patients when offered by qualified tinnitus specialists. Thus, it is essential to inform patients who complain of tinnitus that good services are available, but that they must be careful to obtain services only from qualified practitioners. Due to the subjective nature of tinnitus, a great many tinnitus “therapies” have been developed that have no scientific basis. Patients bothered by tinnitus have been known to try “just about anything”

in an effort to obtain relief. It is unfortunate that this condition is vulnerable to questionable practices. Medical providers of all disciplines thus have the responsibility of providing accurate and positive information to these patients and referring them appropriately for any needed services.