ASSOCIATED AUDIOLOGISTS

Physician Update on Hearing and Balance Disorders

A Clinical Newsletter for Physicians

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A Clinician's Guide to Hearing Loss and Patient Referral

Nearly 15% of all Americans have some degree of hearing loss.[1] It is most common in older adults, occurring in about 50% of adults in their 70s and 80% of those 85 years and older.[1,2]

Though there are several types of hearing loss, the most common in adults and the one you are most likely to encounter in your clinical practice is age-related hearing loss, or presbycusis.

The cause of presbycusis is multifactorial, with contributions from genetic factors, aging, oxidative stress, cochlear vascular changes, and environmental factors (e.g., noise, tobacco, alcohol, ototoxins).[3]

Despite this high prevalence, hearing loss is underdetected and undertreated. Only about one-third of people with self-reported hearing loss have ever had their hearing tested, and only 15% of people eligible for hearing aids consistently use them, citing factors such as cost, difficulty using them, and social stigma.

Diagnosing Presbycusis

Patients may present to you with self-recognized hearing loss or may mention concerns from family members who have noticed difficulty with understanding everyday conversations and sounds. Patients with hearing loss also may present with sensitivity to loud noises, tinnitus, or vertigo.

Presbycusis characteristically involves gradual onset of bilateral high-frequency hearing loss associated with difficulty in speech discrimination. Conversations with background noise become difficult to understand.[4, 5]

Clinicians should ask about duration of hearing loss and whether symptoms are bilateral, fluctuating, or progressive. The evaluation should also include a neurologic review; history of diabetes mellitus, stroke, vasculitis, head or ear trauma, and use of ototoxic medications; and family history of ear conditions and hearing loss.

Patients in whom hearing loss is suspected should be referred for pure tone audiometry, in which signals are delivered through air conduction and bone conduction to assess hearing thresholds.[4] This differentiates conductive from sensorineural hearing loss and characterizes the pattern of hearing loss at various frequencies. A complete audiologic evaluation also includes evaluation of speech perception, and may include tympanometry, acoustic reflex, otoacoustic emissions, and sometimes auditory evoked potentials.[6]

Management of Hearing Loss

An audiologist can typically assume responsibility for treating patients in whom hearing loss is diagnosed and hearing aids are recommended. This responsibility includes recommending hearing aids appropriate for the patient's hearing loss in consideration of their lifestyle and budget. The audiologist also can provide ongoing hearing rehabilitation.

Also within the audiologist's scope of practice is aural rehabilitation, tinnitus diagnosis and management, vestibular diagnosis and treatment, hearing protection, and assistive listening devices.

If the audiologist determines that the patient's hearing loss requires further medical attention, a referral to the appropriate medical specialist should be made.

Advising Patients Regarding Hearing Aid Affordability

One of the most common reasons patients cite for not wearing hearing aids is cost. However, changes are in process to provide options and possible financial relief to patients who are candidates for hearing aids. Here are some facts you may want to share with your patients regarding this important concern:

- Unlike many medical devices, Medicare currently **DOES NOT** cover the cost of hearing aids.
- Big box stores and buying clubs typically **DO NOT** accept insurance as payment for hearing aids, nor do they provide diagnostic testing or recommended follow-up critical to long-term success.
- Some private insurance plans and Medicare Advantage plans may have hearing aid benefits that help pay for hearing aids using third-parties. However, there are a wide range of plans which must be checked carefully. Advise patients that before they purchase hearing aids, they should ask their audiologist for a clear understanding of what is provided and what is or isn't covered.
- The Over-the-Counter (OTC) Hearing Aid Act of 2017 directed the FDA to issue regulations for a new category of OTC hearing aids that provide reasonable assurances of the safety and effectiveness for adults age 18 and older with **PERCEIVED** mild to moderate hearing impairment. *(https://www.federalregister.gov/documents/2021/10/20/2021-22473/medical-devices-ear-nose-and-throat-devices-establishing-over-the-counter-hearing-aids)*. The government is still defining the parameters of these devices. The cost of these hearing aids is expected to range from approximately $200 to $1,000 compared with $800 to $4,000 for conventional prescription hearing aids.
- Professional associations, including the Academy of Doctors of Audiology, the American Academy of Audiology and the American Speech-Language-Hearing Association, recommend that the best outcomes are achieved with a comprehensive audiologic evaluation and rehabilitation program.[7]
- Individuals whose audiologic evaluations indicate moderately severe, severe or profound hearing loss are not candidates for over-the-counter hearing aids. They should be tested for and fit with prescription hearing aids.

"As an audiologist in private practice, changes to hearing aid categories to include an OTC option to make hearing aids more accessible and affordable for the general public is critical. However, it's just as important to make sure that those with any degree of hearing loss are aware of the crucial role the audiologist plays in assisting them for success. Just like any rehabilitation, it is a process not just linked to a product or one-time event."

Timothy Steele, Ph.D., President and CEO of Associated Audiologists, has been involved with providing OTC input through his leadership on the board of the Academy of Doctors of Audiology.

For detailed clinical recommendations regarding hearing loss, diagnosis and treatment, refer to the American Family Physician, *https://www.aafp.org/afp/2019/0715/p98.html#afp20190715p098-b50.*

References

1 Mahboubi H, Lin HW, Bhattacharyya N. Prevalence, characteristics, and treatment patterns of hearing difficulty in the United States. JAMA Otolaryngol Head Neck Surg. 2017;144:65–70.

2 Lin FR, Thorpe R, Gordon-Salant S, et al. Hearing loss prevalence and risk factors among older adults in the United States. J Gerontol A Biol Sci Med Sci. 2011;66(5):582–590.

3 Cunningham LL, Tucci DL. Hearing loss in adults. N Engl J Med. 2017;377(25):2465–2473.

4 Uy J, Forciea MA. In the clinic. Hearing loss. Ann Intern Med. 2013;158(7):ITC4–ITC1.

5 Edmiston R, Mitchell C. Hearing loss in adults. BMJ. 2013;346:f2496.

6 Simel DL, Bagai A, Thavendiranathan P, et al. Hearing impairment. In: Simel DL, Rennie D, Keitz SA, eds. The Rational Clinical Examination: Evidence-Based Clinical Diagnosis. McGraw-Hill; 2009.

7 Manchaiah V. Direct-to-consumer hearing devices for adults with hearing loss: definitions, summary of literature, and analysis of risks and benefits. Perspect ASHA Special Interest Groups. 2018;3(SIG 7):5–11.

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