

# Sudden Hearing Loss Needs Emergency Treatment

By Dennis A. Colucci, AuD

When I see patients whose lives are significantly affected by sudden hearing loss and comorbid tinnitus, I often learn that they were initially treated with antibiotics for their hearing loss but not given the benefit of a hearing test or professional follow-up care. The saga continues when their aural fullness does not resolve within days to many weeks, and an ENT physician or audiologist eventually sees the patient. By that time, though, the benefits of treatment can be limited or already lost.

The functional deficits related to sudden sensorineural hearing loss (SSNHL) are catastrophic. The condition results in severe difficulty localizing sound; hearing from the affected side; and listening to soft voices, with background noise, or in reverberant rooms. Most patients also experience a significant psychological burden of sadness and depression that affects interpersonal relationships, environmental engagement and awareness, and quality of life.

For these reasons, SSNHL represents a medical emergency to determine the cause, if possible, and to provide best practices for treatment and management. The condition is also an audiological emergency because the site of the lesion, cause, aural rehabilitation, and management need to be addressed in a timely manner. As noted in a clinical guideline from the American Academy of Otolaryngology–Head and Neck Surgery Foundation (AAO-HNSF; *Otolaryngol Head Neck Surg* 2012;146:3[suppl]S1-S35), “Prompt recognition and management of SSNHL may improve hearing recovery and patient quality of life.” I always start the patient with counseling, instrumentation, sound therapy, and tinnitus treatment as soon as possible to lessen the effects of sudden sensorineural hearing loss and provide a functional strategy.

According to the National Institute on Deafness and Other Communication Disorders, sudden deafness is defined by a dramatic onset of hearing impairment that occurs within 72 hours. In any patient with a complaint of sudden aural fullness, providers should minimally examine the ears to rule out impacted cerumen and then conduct diagnostic pure-tone air and bone-conduction testing to identify a conductive versus sensorineural hearing loss.

Should a sensorineural hearing loss be identified, the audiometric standard is to measure a 30-dB shift in three consecutive frequencies, including inter-octaves, in one or both ears. I would also consider as referable a sudden drop in hearing that occurs to a lesser degree but across more



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frequencies and with a complaint of aural fullness. When a prior audiogram is not available, adjacent frequencies and the contralateral ear are to be used for comparison. Should a sensorineural shift in hearing or the sensation of aural fullness be determined, the patient is to see an ENT physician within 24 to 48 hours. If the change is in both ears, the patient should be sent to an ENT office or the emergency room immediately to rule out a central site of lesion such as a brainstem infarct.

Fortunately, most cases of sudden sensorineural hearing loss are cochlear in nature and will resolve without treatment in a few days to a couple weeks. However, most SSNHL is idiopathic, and the loss is presumptive. Therefore, treatment guidelines are designed to manage the underlying mechanisms. While options vary, the AAO-HNSF guideline provides specific recommendations that streamline diagnosis, improve treatment protocols, and suggest timeline options.

The emphasis for healthcare providers is to understand that sudden hearing loss is a medical emergency. Without immediate action, there is likely to be less benefit and more burden to patients, their families, and the healthcare system. I would encourage audiologists to communicate with their medical communities about the significance of early evaluation and the benefits of best practices in audiological and medical care for patients who present with sudden hearing loss. [T](#)



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