

UNTREATED HEARING LOSS AND AUDITORY DEPRIVATION;

IS THERE A CONNECTION?

by Hear Tech Mobile & Hearing Care Center

“Do I really need hearing aid devices? Maybe I'll wait another year or what if I just get one aid for my worse ear, what can it hurt?” Individuals commonly express many of these comments when they are diagnosed with a hearing loss. As Licensed Hearing Care Specialists, our recommendations for hearing aid devices are more often than not met with some resistance. Many of these individuals have experienced hearing loss for a number of years and finally progressed to a point where it is making communication with family and friends increasingly difficult. Many of these individuals are seeking appointments at their spouse or family members insistence.

Estimates indicate there are approximately 36 million Americans with hearing loss and yet only roughly 20% of individuals that may benefit from treatment such as hearing aid devices, will actually pursue it. On average, individuals typically wait 7 years or more following diagnosis of hearing loss before ever being fit with hearing aid devices (ASHA.org). Many are apprehensive about using hearing aid devices. They may believe hearing loss isn't life threatening and they can learn to compensate or adjust their lifestyle to accommodate the loss, feeling no harm done. This is far from the truth and these individuals may be causing more harm in ignoring their hearing loss than they think.

Untreated hearing loss not only leads to physical, social, emotional and psychological problems but recent studies have shown a link to reduced cognitive function as well. According to the National Institute on Aging, individuals with untreated hearing loss are at a higher risk of developing cognitive disorders such as Alzheimer's disease and dementia. A recent Johns Hopkins study indicated a link between untreated hearing loss and cognitive problems including dementia. The study examined individuals with varying degrees of hearing loss and no history of dementia. At the end of 20 years, almost 10% of participants were identified as having dementia. When compared to those with normal hearing, participants with mild loss were three times as likely to develop dementia; those with severe loss were five times as likely to develop the disorder. Overall, the study showed that for every 10 decibels of hearing loss the risk of developing dementia increased by 20%. Auditory deprivation has been suggested as a possible contributor to the cognitive disorder.

Auditory deprivation occurs when the hearing nerve is under stimulated. Untreated hearing loss can result in auditory deprivation that can lead to a weakening of the entire auditory system. Because hearing loss in adults is typically gradual there may be a long period of time in which the auditory system and areas of the brain are deprived of adequate sound. This deprivation can result in atrophy in areas responsible for hearing and understanding speech. Our ears bring in the sound but we hear with our brain. As sound is processed through the auditory system it isn't interpreted as speech until it reaches the auditory centers of the brain. When the auditory system is deprived of sound it affects the ability of the brain to understand speech. If a sound is not reaching the ear then it's not reaching the brain. The amount of auditory deprivation that individuals experience varies but is most likely dependent on the amount of hearing loss and length of time the auditory system has gone under stimulated.

The most common cause of auditory deprivation of the hearing system is not treating a hearing loss with amplification. Atrophy can also occur as a result of single hearing aid use when bilateral hearing loss exists. The aided ear takes most of the listening responsibility leading to a weakening of the unaided ear over time. Studies have shown that even when an unaided ear is later aided it will be more difficult to adapt to the sound because of the deprivation. This becomes very challenging.

Another often-overlooked cause of auditory deprivation can occur as a result of an improper hearing aid device fitting. If the amplification isn't providing adequate sound to the auditory system atrophy can still occur. Annual hearing evaluations are an important step in preventing under amplification. They take into account changes in hearing levels, ensuring the aids are adjusted properly for the hearing loss.

The key to avoiding auditory deprivation and atrophy of the auditory system is to keep it stimulated. Schedule a hearing evaluation at the first sign of hearing loss. If hearing loss is identified don't ignore it. An increasing number of studies have shown that individuals with hearing loss identified and treated early adapt easier and quicker to the amplification resulting in greater overall success.

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You Come To Us or We Come To You!

We look forward to hearing from you!



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