

Physician Update on Hearing and Balance Disorders

A Clinical Newsletter for Physicians

Vol. 5, Issue 2

Evidence continues to mount regarding the benefits of identifying and addressing hearing loss early. From enhancing your patients' quality of life, to helping protect against several health consequences linked to unaddressed hearing loss, the case for early treatment is strong.



Potential Clinical Benefits of Treating Hearing Loss Early

Researchers have recently discovered a significant link between hearing loss and health issues such as cognition, dementia, depression, falling, hospitalization, mortality, and overall physical and mental health.

Consider the latest research on hearing loss and these seven health issues:

- **Cognition:** According to Brandeis University Professor of Neuroscience, Dr. Arthur Wingfield, who has been studying cognitive aging and the relationship between memory and hearing acuity, unaddressed hearing loss not only affects the listener's ability to "hear" the sound accurately, but it also affects higher-level cognitive functioning. Specifically, it interferes with the listener's ability to accurately process the auditory information and make sense of it.
- **Risk of dementia:** A study by researchers at Johns Hopkins and the National Institute on Aging found that seniors with hearing loss are significantly more likely to develop dementia over time than those who retain their hearing. A different study, also by hearing experts at Johns Hopkins, found that older adults with hearing loss are more likely to develop problems thinking and remembering than older adults whose hearing is normal.
- **Brain shrinkage:** Results of a study released in January 2014 by researchers from Johns Hopkins and the National Institute on Aging found that although the brain becomes smaller with age, the shrinkage seems to be fast-tracked in older adults with hearing loss.

A separate study, conducted by Brandeis University Professor of Neuroscience, Dr. Arthur Wingfield, along with colleagues at the University of Pennsylvania and Washington University in St. Louis, has used MRI to look at the effect that hearing loss has on both brain activity and structure. Their study found that people with poorer hearing had less gray matter in the auditory cortex, a region of the brain that is necessary to support speech comprehension. Wingfield has suggested the possibility that the participants' hearing loss had a causal role. He and his co-investigators hypothesize that when the sensory stimulation is reduced due to hearing loss, corresponding areas of the brain reorganize their activity as a result.

- **Risk of falling:** A Johns Hopkins study published in the *Archives of Internal Medicine* showed that people in middle age (40-69) with even just mild hearing loss were nearly three times more likely to have a history of falling. The intensive listening effort demanded by unaddressed hearing loss may take cognitive resources away from what is needed for balance and gait.
- Increased hospitalizations: A Johns Hopkins study found that older adults

with hearing loss were 32 percent more likely to have been admitted to a hospital than their peers with normal hearing. The study also found that older adults with hearing loss were 36 percent more likely to have prolonged stretches of illness or injury (lasting more than 10 days).

- Mortality: One National Institutes of Health-supported study of older people even found that hearing loss is tied to greater risk of dying for older men from any cause, and particularly from cardiovascular causes. The same study found that men and women who used hearing aids, although they were older and had more severe hearing loss, had significantly lower mortality risk compared with hearing impaired men and women who did not use hearing aids.
- **Depression:** Several studies have found a link between depression and hearing loss. A Johns Hopkins study published in the *Journal of the American Medical Association* found that older adults with hearing loss were 57 percent more likely to have deep episodes of stress, depression or bad mood than their peers with normal hearing.

CMS Requires Hearing Screening

Currently, the Center for Medicare and Medicaid Services (CMS) requires a hearing screening at the Initial Preventive Physical Examination (IPPE). Medicare pays for one IPPE per beneficiary per lifetime for beneficiaries within the first 12 months of the effective date of the beneficiary's first Medicare Part B coverage period. Components of the IPPE include screening for hearing impairment, activities of daily living, fall risk and home safety.

Associated Audiologists, Inc. participates in the Physician Quality Reporting System for Audiology and has been involved in beta testing for new quality measures. Future measures will likely include assessment of hearing loss on activities of daily living and development of a plan of care based upon communication needs assessments.

Reference:

Adapted from an article from Better Hearing Institute, Addressing Hearing Loss Sooner Brings Many Benefits, posted 4/8/2015 on *www.betterhearing.org/news*.

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