Hearing Loss and Dementia: What is the Link?

Brenna Carroll, AuD Swedish Otolaryngology-Audiology 715 NE Blakely, 5th Floor Issaquah, WA 98029

Mary Henry, AuD Swedish Otolaryngology-Audiology 600 Broadway Suite 230 Seattle, WA 98122

206-215-4327 (HEAR)



Signs of Hearing Loss

- Feeling that people "mumble" or do not speak clearly
- Difficulty hearing in groups and restaurants
- Hearing a message incorrectly or mistaking one word for another
- Difficulty understanding children, female voices, or different accents



This image was taken from: http://simplyyourhealth.com



Consequences of hearing loss ⁽¹⁾

- Social isolation
- Relationship conflict
- Depression
- Safety concerns
- Greater chance of falls
- Increased anxiety
- Cognitive decline
- Impaired memory



Image taken from Getty Images/istock photo



Hearing Loss and Dementia⁽²⁾

- Accumulating evidence that hearing loss is associated with greater risk of cognitive decline
- More severe losses associated with higher risk cognitive decline
- Evidence that hearing loss precedes cognitive decline
- Evidence that individuals with dementia who have hearing loss decline more rapidly than those without



Implications ⁽²⁾

- Cognitive tests that require adequate hearing (e.g., tests of auditory working memory) may require accommodations
 - Quiet environment
 - Good lighting
 - View of test administrator
 - Assistive hearing devices
- Suggestion that hearing instruments may slow cognitive decline ⁽³⁾



Tools For Your Patients

- Assistive Listening Devices
- Pocket Talker
- TV Ears
- Amplification
 - OTC devices
 - Traditional Hearing Aids



Image taken from mdhearingaid.com



Image taken from earq.com





When to refer to Audiology?

- Refer anyone for a hearing test when hearing loss is suspected, even if the patient is not a candidate or motivated for hearing aids.
- Most hearing loss occurs very slowly over time. It is common that patients do not suspect that they have hearing loss, but may feel that their "partner mumbles" or that they only "can't hear in restaurants"

Medicare patients need referral indicating medical necessity



Communication strategies: Helpful with or without hearing aids

- There are strategies that both patients and their friends/family can utilize to improve communication.
 - Speak slowly and clearly
 - Reduce/eliminate background noise before conversations
 - Turn off TV
 - Rephrase in clear, simple language
 - Face the listener when talking



Clinical pearls

- Hearing loss is a risk factor for cognitive decline.
 - We don't yet understand the relationship
 - Area of new research
- Refer for a hearing test, even if not motivated to obtain a hearing aid
- Consider the impact of hearing loss when administering tests that require good hearing (tests of auditory function)



- Pichora-Fuller, M.K., Mick, P., Reed, M. (2015). Hearing, cognition and healthy aging: Social and public health implications of the links between age related declines in hearing and cognition. *Semin Hear*, 36, 122-139.
- Campos, J. & Launer, S. (2020). From healthy hearing to health living: a holistic approach. *Ear & Hearing,* 41, 99S-106S.
- Sarant, J., Harris, D., Busby, P. et al. (2020). The effect of hearing aid use on cognition in older adults: Can we delay decline or improve cognitive function? *Clin Med*, 9, 254.



Thank you!

Any questions?

Brenna Carroll, AuD Swedish Otolaryngology-Audiology 715 NE Blakely, 5th Floor Issaquah, WA 98029

Mary Henry, AuD Swedish Otolaryngology-Audiology 600 Broadway Suite 230 Seattle, WA 98122

206-215-4327 (HEAR)

