**Hearing Aids and Cochlear Implants May Reduce Cognitive Decline**

Over the past several years, research has shown that there is a relationship between hearing loss and cognitive decline (including dementia) as well as with structural and functional changes in the brain. Being that there are 55 million people worldwide who have dementia with 10 million new cases being diagnosed every year, it is important to recognize factors that may help reduce the incidence of such an insidious disease. Hearing loss is one modifiable risk factor that should be considered.

In a recent study published in the *Journal of the American Medicine Association Neurology*, helping to correct hearing loss through either hearing aids or cochlear implants significantly reduced cognitive decline. During a two-to-25-year period of time, long term cognitive decline was reduced by 10% in those people who wore hearing aids or had cochlear implants. In addition, cognitive test scores assessing general cognition improved by 3% for individuals using amplification or wearing cochlear implants.

Another study by Glick and Sharma looked at the neuroplasticity and cognitive function of individuals with hearing loss. After assessing the structural and functional changes in the brain caused by hearing loss, individuals were fit with amplification. In addition to benefits surrounding communication, hearing aid use helped cognitive function. Improvements were noted in the categories of global cognitive function, executive function, processing speed, and visual working memory. Cortical reorganization was also recorded.

Although there are many factors which lead to cognitive decline, hearing loss may be a major contributing factor. It is important to take the appropriate measures to prevent cognitive decline and cortical reorganization that occurs with even a mild degree of hearing loss by fitting hearing aids with appropriate amplification.

*Do you have patients who are starting to show signs of cognitive decline?*

*Consider sending them to us for an audiological evaluation.*

Glick, H. and Sharma, A. Cortical Neuroplasticity and Cognitive Function in Early Stage. Mild – to – Moderate Hearing Loss: Evidence of Neurocognitive Benefit From Hearing Aid Use. Neuroscience (2020).

Yeo, B., Song, H., and Toh, E., Association of hearing aids and cochlear implants with cognitive decline and dementia: A systematic review and meta-analysis. Journal of the American Medical Association Neurology. (2022).