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Hidden Hearing Loss and Other Neat Stuff

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I think that one of the most frustrating things that can happen in the clinic is to have a client with complaints of not being able to hear well in noise as their friends, only to find a normal audiogram. In the 1980s and 1990s, I would just look at them at tell them that everything was fine and to go home – nothing needs to be done.

However, with the advent of a series of publications beginning in the early 2000s and increasing in frequency, we now are more than just scratching the surface of how perhaps this isn't "normal hearing" after all. It is true that all cochlear measures such as pure tone detection and otoacoustic emissions are within the normal range, neural measures tend to be abnormal. This has been referred to as "hidden hearing loss." We have clinically available measures to assess this (with an abnormal SP/AP ratio and also by examining the amplitude relationships between wave I and wave V). This is not as common, however, as the popular media has portrayed it – even the *Scientific American* magazine ran a cover feature on this in 2015 – Colleen Le Prell and her colleagues at the University of Texas recently published data showing that there were no measureable neural deficits in those who were "merely" exposed to recreational music and noise sources.

Adam Sheppard has summarized some of the research in this exciting new area in his article entitled "The "No Longer Hidden" Hearing Loss and Audiology: Bridging the Research-Clinic Gap." And to be fair, the tables summarizing the data are my summary notes and not his doing, so if there are any errors that have surreptitiously entered my summary tables, this needs to be blamed on me rather than Adam.

Other featured articles are no less interesting. An important intersection between audiology and mobility concerned falls and their prevention. A comprehensive survey in this important area was ramrodded by Jillian Baxter, Lauren Dunphy, Dana Song, Michael Vekasi, & Janine Verge entitled "Current Fall Prevention Strategies in Audiology Practice: A review of the 2017 CAA Fall Prevention Survey Results."

Another feature article includes an intersection between hearing aids and emotions by Emma Scholey. This comes from the work at SmartLab at Ryerson University in Toronto. Another article about improving speech communication in noisy environments Doug Beck and Nicolas Le Goff has the apt name: "Improving Speech Understanding in Multiple-Speaker Noise."

Although this last item is not a feature article, it falls under the Stories from our Past column and is a two-blog combination that sheds light of hearing aids from our past- these two columns are perhaps the best that I have read in years.

As always, I hope you enjoy this issue of *Canadian Audiologist*, and I wish you all a pleasant and enjoyable holiday season that will soon be here.