HEARING HEALTH MATTERS

FOR PATIENTS OF ADVANCED HEARING / APRIL 2025



BrainHQ Facts

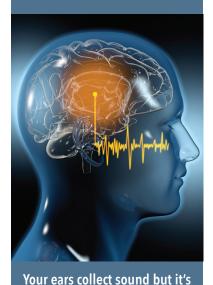


Brain Uses 20% of Oxygen **Breathed**

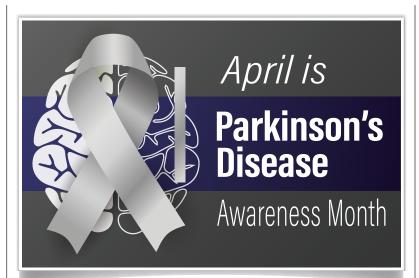
Although the brain accounts for only 2% of the whole body's mass, it uses 20% of all the oxygen we breathe.

A continuous supply of oxygen is necessary for survival.

A loss of oxygen for 10 minutes can result in significant neural damage.



your brain that understands it.



It is a time to raise awareness about the disease and to show support to those living with Parkinson's Disease

The grey ribbon is a recognized symbol used to represent Parkinson's Disease awareness, similar to how pink ribbons widely represent breast cancer awareness. According to Parkinson Canada, more than 110,000 people in Canada live with Parkinson's Disease.

— WHAT IS PARKINSON'S? —

Parkinson's is a complex brain condition. It is a progressive neurodegenerative disease meaning the problems in the brain get worse over time. Scientists believe Parkinson's results mainly from a lack of dopamine in the brain. Dopamine is a neurotransmitter - a chemical messenger, in the brain. Dopamine is responsible for several key functions including motivation and movement among others. While dopamine is the most recognized, it is believed the disease affects multiple chemical systems in the brain.

Although there is currently no cure for Parkinson's, there are available treatments addressing the symptoms of Parkinson's. Because people with Parkinson's show a loss of dopamine-producing neurons in the brain, treatments often focus on restoring dopamine levels or mimicking its effects. And, although medications can alleviate symptoms, they do not slow the progression of Parkinson's.

Everyone's Parkinson's journey is different. People living with Parkinson's experience both movement and non-movement related symptoms. In fact, there are now more than 35 recognized symptoms and they vary from person to person. As the condition progresses, non-motor symptoms may also appear, such as depression, difficulty swallowing, sexual problems or cognitive changes.



Ask One of Our **Audiologists**

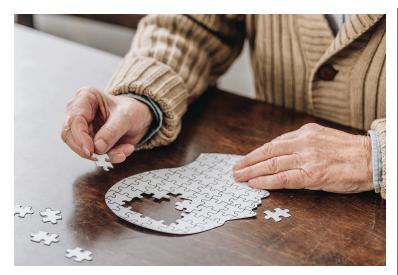
Q: What are some of the early signs of hearing loss, and when should I see the Audiologist?

A: The first symptom of hearing loss for most patients is difficulty hearing in complex listening environments. Are you having any difficulty when there are a few people at the kitchen table? Or when the kids come over? Or when communicating with your grandchildren? Or when you are at a social gathering (i.e. sharing a meal with friends and you can't seem to follow the conversation, yet all the other people seem to be enjoying themselves following the conversation)? It is in these types of scenarios when hearing loss can really start to rear its ugly head and you realize that you are no longer an active part of the conversation. The result is a slow retraction from contributing to the conversation because you may feel embarrassed, and thus you continue to further isolate yourself and find yourself not truly engaging in conversations and relationships. And this is how even a mild hearing loss can really begin to impact your quality of life and relationships with others.

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Parkinson's and Auditory Function

There exists extensive evidence that supports auditory dysfunction as a nonmotor feature of Parkinson's Disease. For instance, studies show that sensorineural hearing loss and cochlear impairment are more severe in the Parkinson's population than in the control groups. Sensorineural hearing loss occurs when the inner ear and auditory nerves are 'damaged' like what we see in cases of aging, noise exposure, ototoxic medications. Other studies show that auditory processing is more impaired in Parkinson's population than in the control groups. Auditory processing is what allows us to understand speech clearly, to hear well in background noise, and to localize sound direction.

As people with Parkinson's age and as their disease progresses, auditory processing deficits will increase over time. These hearing difficulties can contribute to decreased quality of life, social isolation, frustration, and depression. Cognitive decline and

dysfunction are common aftereffects of Parkinson's. And, untreated hearing loss is also associated with poorer cognitive functioning and can contribute to dementia. It is therefore imperative to identify and remediate hearing difficulties in this population in particular as early as possible.

If you are having difficulty hearing, do something about it! And, if you have been diagnosed with Parkinson's, don't forget to treat your hearing difficulties too!

Ready to treat your hearing loss and tinnitus? Call us today or visit us at advanced-hearing.com.

CATCH EARLY, TREAT EARLY.

Call us today to schedule your comprehensive assessment.

AJAX 905-426-4000

OSHAWA 905-723-2273

PICKERING 905-831-8311

UXBRIDGE 905-852-8888

WHITBY 905-666-7726

REFERENCES: Aarsland, D., Batzu, L., Halliday, G.M. et al. (2021). Parkinson disease-associated cognitive impairment. Nat Rev Dis Primers 7, 47. Folmer, R. L., Vachhani, J. J., Theodoroff, S. M., Ellinger, R., Riggins, A. (2017). Auditory Processing Abilities of Parkinson's Disease Patients. BioMed Research International, 2017. Leme, M. S., Sanches, S. G. G., & Carvallo, R. M. M. (2022). Peripheral hearing in Parkinson's disease: a systematic review. International Journal of Audiology, 62(9), 805–813.

COGNITIVE GAME OF THE MONTH

Instructions: Fill in the missing letters and discover the hidden message.

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Advanced HEARING ONTARIO