More Than Movement: Cognitive Changes in Parkinson’s Disease

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Individuals with Parkinson’s disease (PD) may experience deterioration of one or more mental processes, or cognition, especially their ability to plan and problem solve. If a patient’s cognitive impairment is so significant that their ability to perform daily activities is impaired, they may have Parkinson’s disease dementia (PDD). PDD belongs to a broader group of dementias termed Lewy body disorders. In general, these disorders are still poorly understood (see following page for information on research study in this area). However, it is clear that a central driver of disease is the accumulation of the protein “alpha synuclein”, which can accumulate within brain cells, stick together, and form “Lewy bodies”, causing damage to the brain cells. These “Lewy bodies” can spread to the parts of the brain that control various aspects of cognition, and can therefore lead to PDD.

Up to 65% of individuals with PD can go on to develop PDD. Most people with PD who develop PDD do not experience cognitive symptoms until several years after the onset of their physical, motor symptoms (slowness, rigidity, and tremor). Symptoms that individuals with PDD may experience include difficulty adapting to changes, difficulty concentrating, difficulty using or understanding complex language, and difficulty remembering things. Some people with PDD may experience delusions or hallucinations. An individual can be diagnosed with PDD by their neurologist (see following page for additional information on this), who may refer them for further neuropsychological testing, which involves extensive testing of several different aspects of their ability to think and problem solve.

If an individual is diagnosed with PDD, their caretakers should consider the following suggestions when helping the patient in the home. Try to maintain a low-stimulus environment (i.e. minimize background noise if in conversation, reduce clutter). Remind the patient of the time, date, and time of year, as they may have difficulty orientating themselves. If they have difficulty reading or following instructions, consider using pictures or other visual cues to help them complete these tasks. Remember to keep a routine, as the patient’s familiarity with his/her environment will minimize distress and confusion.
Center Spotlight! : New Lewy Body Disorders Study
“Targeting Lewy Body Specific Pathology using Biomarkers”

What is this study about?
The aim of this study is to develop better biomarkers for diagnosis and treatment of Lewy Body disorders. In particular, there is a need to understand how the contribution of co-existing Alzheimer’s disease may affect the diagnosis and clinical course of Lewy Body disorders.

Who can participate?
An individual may be able to take part in the trial if he or she speaks English or Spanish and:
- Has been diagnosed with Dementia with Lewy Bodies (DLB)
OR
- Has been diagnosed with Parkinson’s disease with cognitive changes

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What is involved?
This study will recruit individuals with Lewy Body disorders causing cognitive impairment or dementia. Participants will have up to 6 visits over 5 years. Participants will have a comprehensive neurological evaluation, cognitive and behavior tests, and will donate blood, urine, and cerebrospinal fluid samples.

Who is the Study Sponsor?
The United States National Institutes of Health

The Doctor Is In
Q&A with CUIMC
Movement Disorders specialist
Dr. Cheryl Waters—Movement Specialist
Dr. Stephanie Assuras—Neuropsychologist

Q: I am starting to have trouble with my memory and finding words mid-conversation. Is there a medication that can help with this? What else can be done to treat these changes?

A: The first thing you should do is go to your doctor and be tested for B-12 and thyroid levels. It is also extremely important to review the medications you are taking, including over the counter medications. Make sure you are not taking diphenhydramine, which is commonly used for sleep, and check to see if you are taking any medications for urine dysfunction. Then ensure you are getting enough sleep (7 to 8 hours per night), exercising, eating regularly, and managing vascular risk factors such as high blood pressure and diabetes. These are important interventions! Only then should you consider thinking about medications for cognitive dysfunction. Both forgetfulness and mild word finding difficulties can be a typical part of normal aging. You might ask your neurologist to refer you for neuropsychological testing that can provide more objective information about your cognitive skills. You can then discuss with your neurologist if you need medications for your memory.

If you have a question regarding Parkinson’s and its treatment that you would like featured in the next newsletter, please e-mail your question to Elizabeth Delaney, LMSW at movementdisorders@columbia.edu

The information published in this newsletter is not intended to replace, and should not be interpreted or relied upon, as professional advice, whether medical or otherwise. Please refer to your own professional for all advice concerning legal, medical, or other matters published in connection with this article.

“Don’t count the days, make the days count.”
-Muhammad Ali, diagnosed with PD in 1984