PD ExpertBriefing:
Cognitive Issues: Advice for Parkinson's Care Partners

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This session was held on:
Tuesday, November 10, 2015 at 1:00 PM ET.

If you have any questions, please contact: Valerie Holt at vhlott@pdf.org or call (212) 923-4700
Cognitive Issues: Advice for Parkinson’s Care Partners

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Cognitive Issues: Advice for Parkinson’s Care Partners

A. Learn about why cognitive issues are part of Parkinson’s disease
B. Understand the types of cognitive issues in PD
C. Look for modifiable causes of cognitive issues
D. Understand what can improve cognition
E. Understand the impact of psychosis and visual hallucinations on people with PD
F. Implement lifestyle modifications that can improve your quality of life
G. Implement lifestyle modification that can improve your loved one’s quality of life
In Parkinson’s disease, Lewy bodies and neuronal cell loss can be found in many brain locations, including areas that affect memory, attention, perception, wakefulness and mood.
PD: Cognitive Impairment

• Cognitive changes may start at the very beginning of the illness
• Changes affect most people with PD and can be mild but distressing
• Cognitive symptoms can fluctuate throughout the day and day to day
• Parkinson’s disease dementia affects a subset of people with PD and refers to cognitive issues that are more extensive and severe enough to interfere with independent function
Cognitive Domains That Can Be Affected

- Executive function
- Visuo-spatial function
- Attention
- Language
- Memory
- Processing speed
Modifiable Causes

A. Low thyroid, low Vitamin B12
B. Other medical illness
C. Other medications
D. Depression
E. Fatigue
F. Orthostatic hypotension
Modifiable Causes: Other Medical Illness

Cognitive changes do not worsening suddenly.

If there is a sudden worsening of symptoms, take your partner to his/her primary care physician for basic labs, urinalysis (and CXR if warranted)
Modifiable Causes: Other Medications

Medications with anti-cholinergic properties

- Used to control urinary frequency and urgency
- Used for depression
- Used for allergies/cold symptoms
- Used to Parkinson’s disease symptoms (tremor)
Modifiable Causes: Other Medications

- Steroids
- Narcotics for pain
- Benzodiazepines for anxiety and sleep
Modifiable Causes: Depression

- Affects up to 60 percent of patients with Parkinson’s disease.
- Depression may mimic or exacerbate cognitive issues.
- Anti-depressants can be very effective.
Modifiable Causes: Daytime Sleepiness

Sleep disorders associated with Parkinson’s disease that can cause daytime sleepiness:
• Sleep fragmentation
• Insomnia
• Obstructive sleep apnea
• Restless leg syndrome

In addition, Parkinson’s disease itself and Parkinson’s medications can cause daytime sleepiness.
Modifiable Causes: Daytime Sleepiness

- Sleep disordered breathing can be treated with CPAP (continuous positive airway pressure)
- Restless leg syndrome can be treated with dopamine agonists, nighttime dopamine, opioids and gabapentin
- Melatonin can be tried for disrupted sleep and frequent awakenings.
- If improving sleep does not lead to improvement in daytime sleepiness – modafinil or armodafinil can be tried
Modifiable Causes: Orthostatic Hypotension

Drop in blood pressure upon standing causing lightheadedness and passing out

Cognition can be affected when blood pressure is low

Can be treated with – hydration, pressure stockings, abdominal binder, slow changes in head position, salt tabs, alpha agonists, fludrocortisone, droxidopa
Cognitive Impairment: Non-Pharmacological Treatments

A number of trials have shown that exercise can improve measures of cognition in Parkinson’s disease.

A recent example: (David FJ et al. Mov Disord. 2015. 30(12): 1657-63)

- modified Fitness Counts, an exercise program that incorporates stretching, balance exercises, breathing, and non-progressive strengthening
- Progressive Resistance Exercise Training (PRET), a weight lifting program which uses increasing loads to build strength
- Both programs improved measures of attention and working memory
Cognitive Impairment: Non-Pharmacological Treatment

A number of trials of cognitive rehabilitation programs have demonstrated a benefit in PD patients. A recent example: (Pena et al. Neurology 2014. 83(23): 2167-74)

60 minute sessions, three times a week for 13 weeks showed improvements in multiple cognitive domains and functional disability:

- attention unit (4 weeks)
- memory unit (3 weeks)
- language unit (3 weeks)
- executive functions unit (2 weeks)
- social cognition unit (1 week)
Cognitive Impairment: Pharmacological Treatment

• The EXPRESS study (2004) supports use of rivastigmine (Trade name Exelon)
  – Worsening of tremor in 10 percent
• Less robust data for the use of the other cholinesterase inhibitors (donepezil, galantamine)
• Small studies of NMDA receptor antagonist memantine showed mixed results
• Effects are typically modest
Cognitive Impairment: Emerging Therapies

• SYN120
  – may help dementia and psychosis
  – Currently in Phase 2 SYNAPSE trial
• Nilotinib
Nilotinib

- A tyrosine kinase inhibitor approved for use in chronic myelogenous leukemia (in doses of 600-800 mg daily)
- At these doses, cancer cells are forced into autophagy, or self-destruction
- At lower doses (150-300 mg daily), it is hypothesized that the drug turns on the autophagy pathway briefly which allows the cells to be cleared of α-synuclein buildup without self-destructing
- Prior to the clinical trial, nilotinib was shown in a mouse model to decrease levels of α-synuclein
- Encouraging results of a Phase I clinical trial with 11 patients were presented at the recent Society for Neuroscience Meeting
- The trial was small and had no control arm
- Some dramatic improvements in motor and cognitive functioning were reported
- Larger trials are being planned
PD and Psychosis

Common symptoms

• Illusions – e.g. Misperception of an inanimate object as an animal or person
• False sense of presence
• Hallucinations – e.g. Small animal or people passing through field of vision. Usually, they are silent.
• Delusions – e.g. paranoia of infidelity or theft
PD Psychosis: Treatments

- Check for other medical illnesses
- Lower PD meds
- If insight is maintained, medications may be left as is
- A medication to control psychosis may be necessary
FAQ

• How much do I push my partner?

• What if he/she does not know that he/she has a problem with thinking?

• How do I know if he/she can’t do something or just doesn’t want to try?
Lifestyle Modifications for Parkinson’s Care Partners

• Focus on your partner’s abilities
• If you are becoming frustrated, take time for yourself
• Do activities with your partner that you both enjoy
• Join a care partner support group
• Seek help for yourself – counseling, financial planning
• Find others in your support network who can help
Lifestyle Modifications for People with Parkinson’s Disease

• Get adequate rest
• Eat a healthy diet. A Mediterranean diet, for example, has been associated with improved cognitive function
• Do not multitask
• Focus on your abilities
• Introduce novelty - learn something new
• Exercise
• Engage socially with others
• Stay busy and fill your schedule
Strategies to Improve Executive Function

• Establish a fixed schedule to achieve the goal
• Set small subgoals on the path to the larger goal
• Have a friend/care partner monitor progress
• Remove temptations from the work area (TV, Ipad, etc.)
Strategies to Improve Memory

• Write appointments/events down, while repeating each item out loud

• Make to-do lists and cross off what has been accomplished

• Set aside a particular place where you keep keys, wallet, etc.

• Do not multi-task
Take Home Messages

• Talk with the doctor about treating any modifiable causes

• Talk with the doctor about trying a medication for cognition

• Work with your partner to stay physically, mentally and socially active

• Take care of the caregiver
Thank You!

“Creativity helps to focus my mind.”

Necklace, Connie Ray
PDF Creativity and Parkinson’s Project
Questions and Discussion
Resources from PDF

Fact Sheets
• Cognition & PD
• Coping Skills for Care Partners

Online Seminars
• Demystifying Hallucinations, Night Terrors and Dementia

Parkinson’s HelpLine
• Available at (800) 457-6676 or info@pdf.org
• Monday through Friday
• 9:00 AM – 5:00 PM ET

Parkinson’s Disease Foundation
Upcoming *PD Expert Briefings*

**Anxiety in Parkinson’s Disease**
*Tuesday, January 5, 2016, 1:00 PM - 2:00 PM ET*
Joseph H. Friedman, M.D., Director, Movement Disorders Program, Butler Hospital and Professor and Chief, Division of Movement Disorders, Warren Alpert Medical School, Brown University

**Dealing with Dementia in PD**
*Tuesday, March 1, 2016, 1:00 PM - 2:00 PM ET*
Jennifer G. Goldman, M.D., M.S., Associate Professor, Section of Parkinson Disease and Movement Disorders, Department of Neurological Sciences, PDF Research Center at Rush University Medical Center
Please complete our SURVEY

Your responses help us to improve the work that we do.

Thank you.