Stanford MEDICINE

Health Care

Parkinson’s Disease and OT

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What is OT?

Occupational therapists help people of all ages participate in daily activities, also known as occupations, that are meaningful to them. They focus on restoring, maintaining, or improving a person's ability to perform tasks related to self-care, work, school, and leisure. This can involve addressing physical, cognitive, emotional, and social factors that impact a person's ability to engage in these activities.

OT Role in Parkinson’s Disease

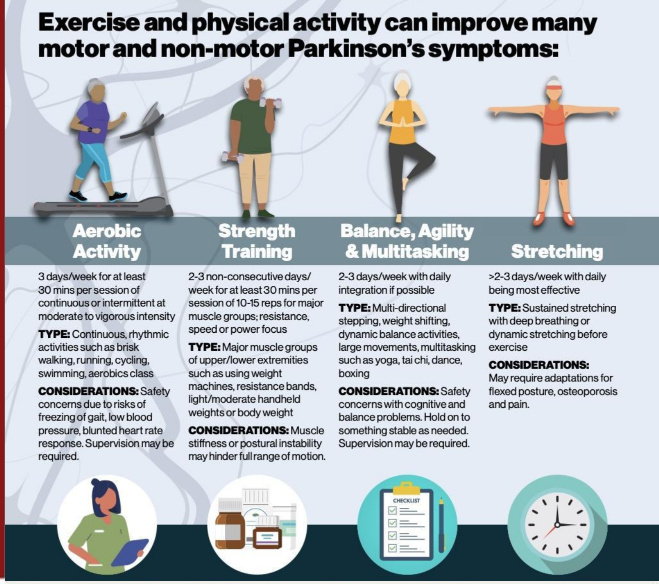
Areas of Focus:

- Independence in Daily Tasks
- Fatigue and Energy Conservation
- Cognitive Skills
- Fine and Gross Motor Skills
- Home Modifications and Safety
- Driving and Mobility
- Adaptive Equipment
- Education

PT Role in Parkinson’s Disease

Areas of Focus:
- Mobility and Flexibility
- Balance and Fall Prevention
- Gait Training
- Balance and Fall Prevention
- Strengthening
- Functional Skills Training
- Pain Management

Physical Activity and Parkinson’s Disease



Why Is Physical Activity So Important?

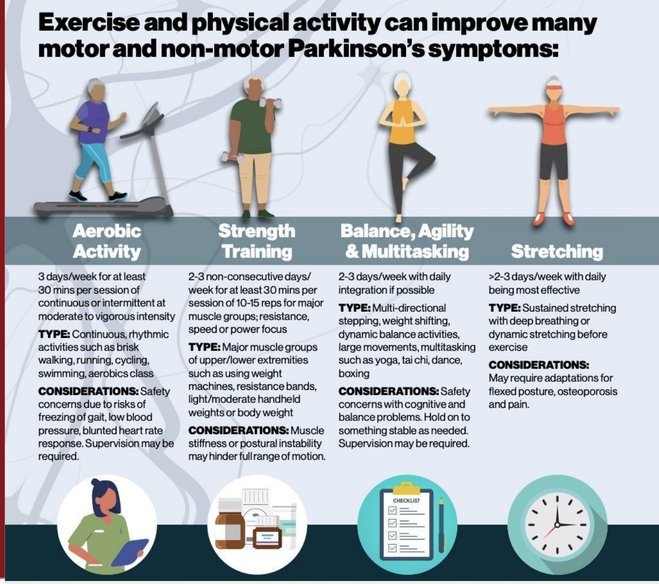
(1) PD is associated with a long list of both motor and non-motor symptoms, many of which can be improved with exercise.

(2) Promotes neuroprotection - the ability of a treatment to preserve the neurons in the brain from deteriorating – this can slow down or halt the progression of diseases like PD

“Two hundred thirty-seven patients with early PD , average age 63.0 years, 69.2% male, follow-up duration 5.0 years were included. Regular physical activity and moderate to vigorous exercise levels at baseline did not significantly affect the subsequent clinical progression of PD. However, average regular overall physical activity levels over time were significantly associated with slower deterioration of postural and gait stability, activities of daily living and processing speed in patients with PD.”

“Long-term effect of regular physical activity and exercise habits in patients with early Parkinson disease”. Neurology. 2022;98(8):e859-e871.

Exercise Guidelines for Parkinson’s Disease



Aerobic activity: 3 days a week for at least 30 minute per session of continuous or intermittent movement at moderate or vigorous intensity

Strength training: 2-3 non-consecutive days per week of at least 30 minutes per session for 10-15 repos for major muscle groups; resistance, speed, or power focus

Balance, agility and multitasking: 2-3 days per week with daily integration if possible

Stretching: 2-3 days per week with daily stretching being most effective

Created by: The Parkinson's Foundation and The American College of Sports Medicine

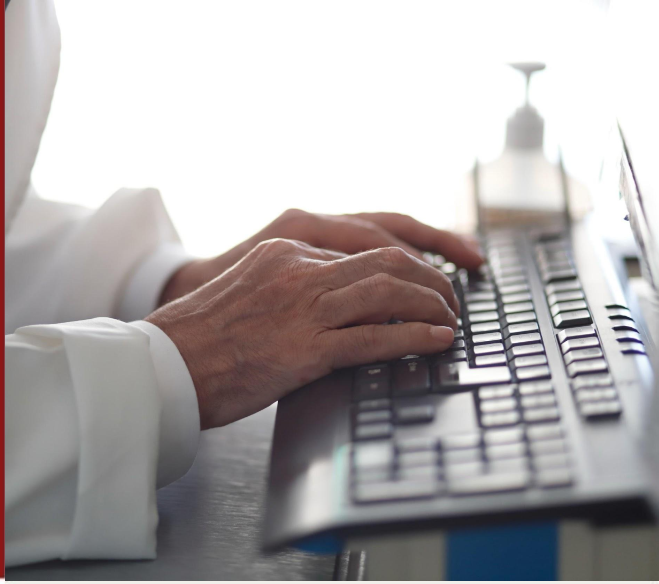
Aerobic Exercise and Parkinson’s Disease

A study recently published in the *Annals of Neurology*, “**Aerobic exercise alters brain function and structure in Parkinson’s disease: A randomized controlled trial**” (Johansson et al., 2022) investigated how aerobic exercise may influence PD-related functional and structural changes in the brain.

Results: This study suggests that the aerobic exercise, unlike stretching, led to a functional and structural change in the balance of connectivity towards anterior putamen of the brain of people with PD. The putamen is involved in learning and motor control/voluntary movement.

Johansson ME, Cameron IGM, Van der Kolk NM, de Vries NM, Klimars E, Toni I, Bloem BR, Helmich RC. Aerobic Exercise Alters Brain Function and Structure in Parkinson's Disease: A Randomized Controlled Trial. Ann Neurol. 2022 Feb;91(2):203-216. doi: 10.1002/ana.26291. Epub 2022 Jan 19. PMID: 34951063; PMCID: PMC9306840.

Workplace Accommodations



Questions to Consider:
What limitations is the employee experiencing?
How do these limitations affect the employee and the employee's job performance?
What specific job tasks are problematic as a result of these limitations?
What accommodations are available to reduce or eliminate these problems? Are all possible resources being used to determine possible accommodations?

Resource: Job Accommodation Network (JAN)
https://askjan.org/disabilities/Parkinson-s-Disease.cfm

Questions?