COLUMBIA UNIVERSITY MEDICAL CENTER DEPARTMENT OF NEUROLOGY **PARKINSON NEVERSIETER**



PT and Me: Parkinson's and Exercise Geraldine Yu, PT, DPT, OCS

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Parkinson's disease (PD) is the second most common neurodegenerative disease, largely affecting those later in life¹. However, living with PD need not dramatically change or impact one's lifestyle. It is critical to find early treatment and access to therapeutic resources that can significantly promote long term independence, health, and wellness. A component of early treatment that should be considered is physical therapy.

By definition physical therapists are health care professionals who help individuals maintain, restore, and improve movement, activity, and functioning, thereby enabling optimal performance and enhancing health, well-being, and quality of life². The primary motor deficits of PD can be significantly impacted by early participation in physical therapy. Physical therapists that specialize in the treatment of neurological patients - or even those who specifically treat individuals with movement disorders would be best suited to address symptoms and improve overall functional mobility.

Specific interventions within physical therapy can aid in addressing the motor symptoms that commonly occur in PD– tremor, bradykinesia (slowness of movement), rigidity, and postural instability. Programs including LSVT BIG (Lee Silverman Voice Treatment—BIG) and PWR! (Parkinson's Wellness Recovery) train and certify therapists to deliver specific movements that address common PD symptoms. These regimens take advantage of underlying principles of neuroplasticity – the ability of the brain to form new connections and reorganize in response to learning or experience³. Furthermore, more and more research is showing that intense aerobic exercise benefits those with PD and might even slow disease progression. The intensity, complexity, and consistency of exercise are crucial for positive outcomes.

As knowledge and awareness spreads about Parkinson's disease, consider early intervention from a physical therapist as an essential means of improving one's health and wellness. Always remember to consult your physician first and seek out an experienced therapist who can address your specific needs and concerns.

Support Groups!



The Department of Neurology currently offers a Deep Brain Stimulation (DBS) support group. For information regarding the next DBS meeting, please contact Linda Winfield, RN at 212-305-1303.

Parkinson's Unity Walk!

<u>When:</u> Sat. April 28, 2017 <u>Where:</u> Central Park NY,NY



<u>Why:</u> To fundraise and raise awareness for the PD community and research.

If you are interested in walking with the CUMC team or want more information about the walk, please call Elizabeth Delaney, LMSW at 212-305-5779 or e-mail ead2179@cumc.columbia.edu

- 1. https://www.cdc.gov/genomics/hugenet/casestudy/parkinson/parkcoffee_view.htm
- 2. http://www.apta.org/ScopeOfPractice/
- 3. https://en.oxforddictionaries.com/definition/neuroplasticity



Center Spotlight! : Clinical Trials

Have you had Parkinson's disease for over 5 years?

Do you take levodopa to treat your PD symptoms?

If you answered yes to both questions, you may be a potential candidate for the Nilotinib in Parkinson's Disease Study (NILO-PD). Nilotinib is currently approved by the U.S. Food and Drug Administration (FDA) to treat a cancer of the white blood cells. But, preliminary studies suggest nilotinib might also have several beneficial effects in Parkinson's disease (PD). This study will evaluate the safety and tolerability of nilotinib in Parkinson's disease. It will also explore effects on PD symptoms, in preparation for future studies.

You may qualify for this study if you:

You are between 40 and 79 years of age

You were diagnosed with PD for at least 5 years

You have been on a stable regimen of PD medications for at least 30 days prior to the screening visit

You are willing to undergo 2-3 lumbar punctures

What is involved if I participate?

Your participation will last approximately 8 to 9 months and will include 13 in person clinic visits Participants will be randomly assigned to receive daily oral doses of nilotinib or placebo – an inactive pill used in research studies to determine if the active study drug is effective.

Several blood samples will be collected throughout the study, along with required Lumbar Punctures at certain visits.

If you are interested in participating or want to learn more, contact Amber Ratel at 212-305-3938

Division of Movement Disorders

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Should you be interested in discussing how you can help support our clinical, research, and patient care activities, please contact Matt Reals, Senior Director of Development, at 212-304-7203 or mr3134@columbia.edu

The Doctor Is In with Dr. Un Kang

Monthly Question with CUMC Movement Disorders specialist

Q: What type of exercise should I do and how hard should I work out for PD?

A: There are numerous studies showing the benefit of exercise in PD. In fact, many different types of exercise

such as progressive resistance exercise (increasing the weight load as you get better), treadmill walking, dancing, and Tai Chi, have been shown to be helpful. It's unknown whether any specific type of exercise is better than others. What is crucial is to find exercise that you enjoy and stick with it. In addition, recent evidence suggests that high intensity (higher heart rate) aerobic exercise on a treadmill is more efficacious than moderate intensity exercise. So whatever exercise you pick, do it regularly and push it a bit harder as you get better. Whatever you do, be sure to get proper supervision so that you do not hurt yourself and remember to consult your physician first.

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 <u>movementdisorders@columbia.edu</u>

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