## Health Medicine

## Parkinson's Disease: Common Symptoms and Treatments



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Parkinson's Disease (PD) is a progressive neurologic disorder that affects more than 10 million people worldwide, including 1 million in the United States. While there are some commonalities, PD is a diverse disorder, which can make it challenging to diagnose and treat.

Perhaps the most recognizable symptom of PD is a tremor, but 30% of people who have PD do not ever experience a tremor. The PD tremor occurs at rest, which differentiates it from tremors caused by other disorders. It most commonly occurs in the hands, but it can also impact other areas of the body, such as the legs or jaw. Some people describe feeling an internal tremor that is not seen but feels like a quivering or shaking inside their body. The tremor can temporarily worsen when an individual experiences stress, exertion, or intense emotion. It can interfere with an individual's ability to perform daily tasks, such as writing, shaving, eating, or using a keyboard, and is often one of the more frustrating symptoms for a person diagnosed with PD.

Other movement symptoms associated with PD include rigidity, a hunched posture with walking, and a slowness of movement known as bradykinesia. Many people also experience postural instability and balance deficits. Freezing, or feeling as if your feet are glued to the floor, can occur at initiation or during walking, typically when navigating a doorway or other narrow space, during turning, or when changing surfaces. These changes can make individuals fearful of falling and less likely to participate in home

and community activities, which can lead to deconditioning and social isolation.

Although Parkinson's Disease is typically thought of as a movement disorder, there are multiple nonmotor symptoms of PD. Though not easily observable by family and friends, these symptoms can sometimes be even more bothersome and disabling than the motor symptoms. These include constipation, cognitive changes, fatigue, skin changes, hallucinations, loss of taste and smell, depression and anxiety, fatigue, lightheadedness, weight loss, and urinary incontinence.

Often it is a friend or family member who notices changes in a loved one, which then leads to seeking treatment. This is because PD interferes with the body's feedback system to recognize and correct for abnormal movement. People who have PD have a loss of neurons in the part of the brain that creates dopamineneurotransmitter involved in movement. When the brain has less dopamine, it creates smaller movements, which leads to some of the impairments seen in PD. This problem is exacerbated by the fact that a loss of dopamine also causes people to be unable to detect changes in their movement. Those with PD often have no idea that they have begun to move differently.

Though there is no cure for PD, there are medications available that can greatly improve some symptoms and therefore improve quality of life. People react differently to different medications, so it is important for a person with PD to see a neurologist, ideally a movement disorder specialist, who is experienced in treating patients with PD and is keeping up to date with the newest medications.

When taking medications, some people experience distinct "on" and "off" times. As the medication takes effect, there is a period of feeling good, or "on." As the medication tapers off, there is a lag before the next dose takes effect known as an "off" time where symptoms are not well managed. It is important to take the medication exactly as prescribed by your doctor, because keeping the level of medication in your system as constant as

possible will lead to the best symptom management.

The most important thing that any individual diagnosed with Parkinson's Disease can do is to exercise. Exercise has been continually demonstrated to delay the progression of, and in some cases even reverse, symptoms of PD. An immediate effect of exercise is the release of dopamine, so some individuals will notice an improvement in their symptoms immediately following exercise. The long-term benefits of exercise include neuroplasticity, which is an actual changing of the brain's physiology and structure. This means that the brain can rewire itself to use the dopamine that it has available more efficiently, leading to fewer symptoms.

Thirty minutes a day of moderateintensity exercise is recommended to help with the symptoms of PD. This can be any exercise that makes you a little out of breath and a little sweaty. If you are thinking about how hard you are working on a 0-10 scale where 0 is lying in bed and 10 is running for your life, you should be working at about a 6 or a 7. This exercise can come in any form you choose, from walking to bicycling to swimming to kickboxing. If an individual is more sedentary, it can even be accomplished through a chair

program involving large movements of both the arms and the legs to increase heart rate. It is important to choose a type of exercise that is enjoyable, as the individual will need to maintain the daily exercise throughout the course of his or her life.

Physical therapy plays an integral role in the treatment of PD. A physical therapist (PT) will evaluate the patient's specific impairments and help him or her to move with appropriate amplitude. The PT will instruct the patient in an exercise program designed to recalibrate his or her movements. The patient can expect to be given a home exercise program to continue throughout the course of the patient's life to help manage symptoms.

At WWSPT, our physical therapists are trained in the LSVT BIG and PWR! Up programs designed specifically for patients with Parkinson's Disease. We also run a group exercise class for those who have been treated at our facility in order to maintain gains made during physical therapy. Though people at any stage of the disease can benefit from exercise and physical therapy, early diagnosis and intervention yields the greatest improvements. Call today for an evaluation!

Reference: www.pdf.org



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