

Parkinson's Glossary

Basal Ganglia

A cluster of nerve cells near the base of the brain that is important in regulating both movements and emotions.

Substantia Nigra ("black substance")

An area of the mid brain where nerve cells manufacture the neurotransmitter dopamine. Cells in this area are destroyed in PD.

Dopamine

One of a number of chemicals used by nerve cells to transmit nerve impulses (neurotransmitter). Messages are carried electrically along individual nerve cells, but signaling from one nerve cell to another is usually accomplished by releasing a neurotransmitter chemical. Dopamine is the main neurotransmitter of the nerve cells that die off in PD.

Dyskinesia

Abnormal movement of voluntary muscles.

Dystonia

Involuntary spasms of muscle contraction that cause abnormal movement and posture.

Freezing

Temporary inability to move.

Can PD Be Treated?

Caring for someone with PD takes a team approach that includes your neurologist along with specialists in neurosurgery, neuropsychology, psychiatry as well as physical, occupational and speech therapists. Your neurologist can help direct you to the appropriate team member when needed.

YES



Our Mission

Educate and provide direct patient support to people affected by Parkinson's disease and related movement disorders, their loved ones and care partners as well as the physicians and other allied health professionals who diagnose and treat individuals with the disease. Ensure that everyone with Parkinson's or a related disorder has access to responsive quality care and support.

The Michigan Parkinson Foundation offers patient education programs for the newly diagnosed, sponsors more than 76 support groups throughout the state, provides financial assistance for medication and respite care for qualifying families.

Call us today. We can help.

The Michigan Parkinson Foundation is a non-profit organization, funded primarily by private contributions, memorials and grants. If you're interested in making a donation to help people with Parkinson's disease, OR would like to volunteer at the Michigan Parkinson Foundation Office, please contact us directly by phone or visit our website at www.parkinsonsmi.org.

30400 Telegraph Road - Suite #150
Bingham Farms MI 48025
(248) 433-1011 or (800) 852-9781 - Fax: (248) 433-1150

What is Parkinson's disease and how is it treated?

Parkinson's Facts & Info

Parkinson's disease (PD) is a chronic neurological disorder which results from the loss of specific nerve cells in a tiny region of the brain. PD is one of the most common movement disorders and can vary greatly in its impact on discomforts, disabilities and quality of life. Fortunately, there is a lot that can be done for living well with PD, and many developments have led to effective treatments and will, some day, provide a cure. For now, treatment is entirely symptomatic (controlling its symptoms, often very effectively).

How is Parkinson's Diagnosed?

PD is diagnosed by carefully assessing a patient's history and a thorough neurological examination. While there is no single test to establish the diagnosis, the evaluation might involve imaging the brain by CT, MRI, or DaTSCAN. Rarely, other conditions mimic typical PD and a careful neurological assessment may be necessary to exclude alternative disorders (sometimes termed "Parkinson-plus" syndromes).

Over 30,000 Men and Women in Michigan Have Been Diagnosed

At this time there is no cure for PD. However, there are highly effective treatments which include both medications and surgical procedures that can help to relieve the symptoms of most patients.

Call us - We can help!

 **800-852-9781**
TOLL FREE HELP LINE

 parkinsonsmi.org

Symptoms of Parkinson's

Resting Tremor

Tremor is a rhythmic movement or shaking of any part of the body. The tremor of PD is called a "resting tremor" because it is present when a limb is at rest and may be reduced or go away when the limb is held up or used.

Bradykinesia

Slowed movements, decreased dexterity, or inability of movement (akinesia or "freezing") is characteristic of PD.

Rigidity

Muscular stiffness or rigidity in arms, legs, the trunk can cause discomfort, a cramping sensation or difficulty relaxing the muscles. Sometimes there is a ratchety ("cogwheeling") quality to passively moving the limbs.

Loss of Balance

A person's ability to maintain an upright balance and the ability to recover balance after a disturbance of movement may be impaired. This problem can lead to falls.

Other Motor Problems

Loss of the natural arm swing, taking small steps, shuffling, forward flexed position when standing, small handwriting, impassive facial expression, and decreased volume and clarity of voice may occur. Not all symptoms (such as tremor) are present in every patient.

Non Motor Symptoms

People with PD often have one or more non-motor symptoms such as constipation, urinary bladder problems, depression, anxiety, drooling, difficulty with speech, swallowing issues, low blood pressure or memory issues. Those can often be challenging to diagnose, as patients do not easily recognize them, unless specifically asked, and sometimes also difficult to treat.



Best Ways to Live With Parkinson's Disease

An active lifestyle with regular, daily exercise and careful attention to the effects of the medication are key elements to living life fully with Parkinson's disease (PD) and overcoming the disabilities associated with it.

- Maintain a positive attitude and continue to engage with family and friends.
- Establishing a relationship with a neurologist who can work with you to develop a treatment plan to include medications and managing your daily activities is an important part of living with PD.
- Joining a Parkinson's Support Group, as well as Michigan Parkinson Foundation, will keep you informed on the developments in treatment for PD and will help you and your family keep up to date.

Parkinson's Disease and Its Impact

Who Does Parkinson's Affect?

Parkinson's disease affects over 1 million people in the United States. It typically begins insidiously between 50-65 years, affecting up to 1.5% of the population (men slightly more than women). As many as 5% of cases begin at a younger age. No strong risk factors have been identified, although sometimes there are familial trends suggesting inheritance and a number of at-risk genes have been identified to implicate the rare versions of hereditary PD.

What is the Natural Course of Parkinson's Disease?

The symptoms and course of Parkinson's disease (PD) varies between individuals. For many people, the symptoms can be quite mild, and they may experience little progression of the symptoms over more than ten years after the onset of the condition. However, for others the symptoms may progress at a faster rate. Poor balance can lead to frequent falls often resulting in disability. Additionally, in mid to advanced Parkinson's some patients may experience cognitive impairment, hallucinations, paranoia and delusions. If you are experiencing any of these symptoms, speak up. Tell your physician. There are treatment options that can help with these symptoms.

How is Parkinson's Disease Treated?

Medication

Parkinson's disease is primarily treated with medications, life style modification, exercise and treatment of other non-motor symptoms. In some instances, surgical therapy may also be utilized to treat PD symptoms. The mainstay of PD treatment is medication, particular levodopa (the active ingredient of Sinemet®). This drug is the precursor of a brain signaling chemical called dopamine, which is deficient in the PD brain. Replacing dopamine can reverse most PD symptoms. Levodopa is also useful for diagnosing PD and it provides continuing long-term benefit. Levodopa benefits can become irregular and drugs to extend the duration of each dose include COMT inhibitors (entacapone and tolcapone) and MAO-I inhibitors (selegiline, rasagiline and safinamide). Levodopa in liquid form can be infused into the GI tract for improved control (Duopa).

Two drugs target tremor: anticholinergics (trihexyphenidyl and benztropine) and amantadine. The latter drug also treats dyskinesia. Dopaminergic agonists (pramipexole, ropinirole and rotigotine) can augment the effects of levodopa.

Brain Surgery

If medications are effective, electrical stimulation of the brain (deep brain stimulation, or DBS) is an established and safe treatment. A fine wire (electrode) is placed in the brain and attached under the skin to a pacemaker-like device implanted in the chest. DBS alter brain circuitry and can provide remarkable benefit when conventional medications are not sufficiently effective (especially for controlling tremor and dyskinesia).

Complimentary Therapies

Currently there is no scientific evidence indicating the benefits of supplements, vitamins or herbs for the treatment of Parkinson's disease. If you are taking over the counter supplements for any reason, be sure to inform your physician, as those supplements may interfere with the medication being prescribed for you.

Talk to your neurologist about the best treatment option for you.