

Treatment

Medication is the primary treatment for symptoms of Parkinson's.

In a few cases, surgery may also be an option. It is very important for you, your family and /or caregivers to develop a solid understanding of the treatment options that may be available.

Focusing on exercise, stress management, proper nutrition and other available therapies is also part of living well with Parkinson's.

Do I need a Neurologist?

According to the *Canadian Guidelines on Parkinson's Disease*, people suspected of having Parkinson's should be referred to a neurologist for diagnosis and ongoing care.

A neurologist is a physician who diagnoses and treats disorders of the nervous system. A medical referral by a family physician or a medical specialist is required for a consultation. The neurologist will report findings to the family physician.

Neurologists are located throughout ON, although people living in small towns and rural communities may have to travel some distance for a consultation. Many community neurologists treat a variety of neurological disorders including Parkinson's but they may not specialize in one specific disorder.

Movement disorder specialists are neurologists that have further specialized in Parkinson's disease and related conditions. There may be a significant wait to get in to see a movement disorder specialist; however, in addition to having a higher level of knowledge of Parkinson's, these specialists are often tied into, or aware of research and clinical trials that you be eligible for. Some movement disorder specialists have clinics so patients can access nurse specialists, physiotherapists and other allied health care professionals.

To find neurologists in your area visit the website of the College of Physicians and Surgeons (CPSO) of ON www.cpso.on.ca PSCNO has a list of movement disorder specialists we are aware are accepting new patients: please call us.

If you do not have a family doctor, you can visit the CPSO website, or register with Health Care Connect online at www.ontario.ca/healthcareconnect or by calling 1-800-445-1822.

What medications are used to treat Parkinson's?

Below are some of the most commonly used types of medication:

- Levodopa: converts into dopamine in the brain. Includes Sinemet® (levodopa/carbidopa), Prolopa® (levodopa/benserazide), and Duodopa® (levodopa/carbidopa intestinal gel).
- Dopamine agonists: mimic the action of dopamine in the brain by stimulating receptors within the brain and include medications such as pramipexole (Mirapex®), ropinirole (Requip®), bromocriptine (Parlodel®), rotigotine (Neupro®)
- Anticholinergic agents: correct an imbalance between dopamine and acetylcholine in the brain and include medications such as trihexyphenidyl (Artane® or Apo-trihex®), and benztropine (Cogentin®)
- COMT inhibitors: block an enzyme that breaks down levodopa. A common one is entacapone (Comtan®).
- Levodopa/carbidopa/entacapone (Stalevo®): substitutes individually administered immediate-release levodopa/carbidopa + entacapone. Used to replace immediate-release levodopa/carbidopa (without entacapone) when patients experience end-of-dose wearing off.
- Monoamine-Oxidase-B-Inhibitors (MAO-B): block an enzyme that breaks down levodopa and include medications such as selegiline (Eldepryl®) and rasagiline (Azilect®).
- Amantadine (Symmetrel®): Enhances dopamine release by blocking glutamate, a neuro-transmitter

When someone has only mild symptoms which do not interfere with their quality of life, they may decide, together with their physician, to postpone drug treatment until symptoms worsen. During that time, they may decide to rely on a healthy lifestyle by focusing on exercise, stress management and diet.

Medications can, however, provide relief or a significant decrease in symptoms. Increasing the amount of dopamine can alleviate the symptoms but does not slow the progression of Parkinson's. As the symptoms worsen, more medication may be needed.

Taking medication on time is a crucial part of treatment. It is very important for the person with Parkinson's and their family and friends to understand the actions and side effects of medications and what improvement can be reasonably expected.

As Parkinson's is a very individual condition, medication is prescribed and adapted to individual needs and can help to achieve good symptom control. Response to medication varies from person to person and not every medication will be considered suitable for everyone.

Ask your physician and/or pharmacist for information about medications and possible side effects. If side effects are experienced, they should be reported to the physician as soon as possible.

The Importance of Timing

If you are taking medications to treat Parkinson's, timing of your doses of medication is extremely important. If you are recently diagnosed, you may not notice any difference in

your mobility or your symptoms when you forget to take a dose. As the disease progresses, however, timing your medication becomes critical. This is primarily due to the nature of the medication and how your brain uses it.

Why is timing so important?

- Medications must be taken on time to maximize normal functioning and symptom control. Delaying your medication can decrease its effectiveness and interrupt your symptom control.
- A regular schedule may help delay the development of motor fluctuations down the road.
- When a medication routine is interrupted, it may take hours or days to return to return to optimal functioning.
- New or increased symptoms tend to appear in relation to meds wearing off. If you take your medication on time, the symptoms become predictable, and your specialist will be able to carefully adjust your medication for maximum benefit.
- Some people with Parkinson's experience heightened anxiety when they are "off," that is, when their medications are not working.

For maximum physical and emotional comfort, take your pills on time, every time.

For more information, visit the *Get it on Time!* campaign section of our website.

Are generic medications as effective as brand-name medications?

As brand-name drugs get older, they cease to be protected by the patent held by the pharmaceutical company that developed the drug. Once this happens, the drug can be 'copied' and produced more cost-effectively. This copied medication is called the generic version.

The generic medications are, in most cases, identical to the brand-name drug and most people using them are satisfied with them. In some instances, however, people using the generic medication find that it is not as effective as the brand-name drug. One example is Sinemet®, where some people with Parkinson's have found this to be the case.

Many drug insurance plans will only pay for the generic version of a medication and the purchase of the brand-name drug can become a financial burden to the patient. If you find that the generic version is not as effective, talk to your doctor about obtaining "Exceptional Access Program" from the Ontario Ministry of Health for coverage of the brand-name product.

Do the medications have side effects? If so, how are they handled?

All pharmacological agents (medication, vitamins, and supplements) can cause side effects. Drugs used to treat Parkinson's are no exception but this does not mean they should be avoided. Side effects for all of the common medications for Parkinson's may be reversed by lowering the dosage or discontinuing treatment under your specialist's guidance. In addition, there are simple measures to control most of them. The more common side effects include:

Nausea

If you are feeling nauseated in spite of taking medications after food, speak to your doctor or our Parkinson's nurse. Your doctor may be able to prescribe a medication for you to control the nausea. In some cases the nausea medication may only be needed for the first weeks or months of treatment, after which time the Parkinson's medication may be tolerated more effectively by your system.

Dizziness

This is often caused by low blood pressure (hypotension.) Dizziness most often occurs in the early stages of treatment and during periods of hot weather, but it often responds to simple measures and may wear off over time. However, if your balance is poor and you feel dizzy, you may fall and this can lead to a fracture with serious consequences. See our Low Blood Pressure help sheet for more information.

Impulsive or Compulsive Behaviour

Drug therapy may contribute to behaviour changes in people with Parkinson's disease. Examples include risk-taking, excessive gambling, cleaning, shopping or obsessive interest in sex. When this behaviour is excessive it can damage relationships and cause great financial and personal hardship. It is vital for changes behaviour to be reported to your specialist, or family doctor even though this may be embarrassing.

Sleepiness

A few people find that their anti-Parkinson's drugs make them suddenly very sleepy. If you sleep well at night but still have excessive daytime sleepiness you should talk to your physician who may recommend adjusting your medication, or adding another medication commonly used to alleviate some of the daytime sleepiness.

Dyskinesia

Dyskinesia refers to the uncontrolled movements, often of the upper body, that are common side effect of high dosages of levodopa. If you are concerned about dyskinesia, talk to your doctor about possibly reducing the dosage of levodopa.

Are there medications I should not take while taking Parkinson's medications?

Yes, there are medications that are strictly contraindicated (must not be taken) with Parkinson's medications, including:

- **Neuroleptics** (a class of drugs used mainly in the treatment psychiatric conditions), except "atypicals" (a limited number of medications with properties unlike the standard neuroleptics)
- **All conventional antipsychotic medications**, such as haloperidol (Haldol®), risperidone (Risperdal®), and olanzapine (Zyprexa®)
- **Major tranquilizers** (a class of drugs used to treat symptoms such as severe agitation and anxiety)

- **Certain drugs for nausea** including prochlorperazine (Compazine®) and metoclopramide (Reglan® and Maxeran®)
- **Meperidine (Demerol®)** – can cause confusion in people not normally confused.

Never assume that a medical professional is aware that you take Parkinson's medication and, further, is aware of the contraindications. You must inform all of your doctors about these critical restrictions. This is particularly important in an emergency situation, surgery or hospitalization when you may be seen by a physician who is unfamiliar with your situation.

Contact PSCNO to obtain a Medication Card, to ensure you have a list of your current medications in one place, and carry it with you at all times.

What about surgery for Parkinson's?

Deep Brain Stimulation (DBS) is a form of surgical therapy for the treatment of Parkinson's disease and essential tremor. It involves placing a metal wire into a specific site in the brain and stimulation of the site with electrical impulses.

DBS has shown to be beneficial for certain select patients by helping the motor symptoms as well as some of the non-motor symptoms of Parkinson's. Surgery is NOT a standard treatment for everyone with Parkinson's and is not an alternative to drug therapy. It is considered only when all medical options have been exhausted. In a limited number of cases, surgery can be effective. The best candidates for surgery meet criteria addressing the length of time since diagnosis, the kind of symptoms, reaction to medications, overall physical health, and overall mental health and stability.

What else can help in the management of symptoms?

Exercise

Exercise can maintain flexibility of joints, muscle strength, improve circulation to the heart and lungs and aid digestion. It also has a positive psychological effect, helping to deal with day-to-day stress and giving the person a sense of control over the condition. It does not alter the fact that a person has Parkinson's but it can help how they feel about it.

Exercise in combination with good drug therapy can help a person to remain active and enhance the quality of life. Stretching exercise, aerobic exercise and strengthening exercises are important. Many people with Parkinson's find that yoga, Tai Chi or Qui Gong (gentle form of Tai Chi) are helpful along with walking and swimming.

Safety, joint protection and balance are important considerations when exercising. Start slowly and consult your physician before starting a new activity.

Physiotherapy

Physiotherapy is a treatment that uses physical means to relieve pain, regain range of movement, restore muscle strength and return patients to the normal activities of daily living. People with Parkinson's can benefit from an assessment by a physiotherapist as a way of identifying and treating specific areas of the body where weakness or stiffness

is a concern. Physical therapists can recommend exercises to address specific concerns.

To find a physical therapist, go to the Ontario Physiotherapists Association and click on "Find a Physiotherapist" www.opa.on.ca

Massage Therapy

Massage therapy has shown to provide temporary relief from pain and stiffness in addition to enhancing relaxation and stress management.

Nutrition

Nutrition can help to maintain your best level of health if you have Parkinson's. If you have nutrition-related questions or develop problems such as weight change, poor appetite, difficulty chewing or swallowing, or constipation, consultation with a registered dietician may be helpful. There is no special diet for people with Parkinson's. Eat a variety of foods each day from the four food groups as indicated by the Canada Food Guide to obtain all nutrients needed for good health. Some people with Parkinson's may notice that their medications do not work as well when they take them with protein. In these cases, people may wish to take their medication either an hour before, or an hour after, meals with protein. It is not recommended that people with Parkinson's remove protein from their diet – rather, they may need to have it at different times in the day. For more information, see our *Nutrition* fact sheet.

Speech Therapy

Many people with Parkinson's develop speech difficulties. Changes in speech may occur as a result of decreased coordination or reduced movements of the muscles involved in breathing, voice, pronunciation, and prosody (rhythm, intonation, and speaking rate). Often the first change noted in speech is loss of volume resulting in a soft or fading voice. The first indication may be frequent requests by family and friends to repeat what has been said.

A Speech-Language Pathologist can evaluate speech problems, provide information and recommend a program. A particular form of speech therapy that is helpful for people with Parkinson's is called Lee Silverman Voice Therapy (LSVT) ©. You may wish to contact the ON Association of Speech/Language Pathologists & Audiologists for general information about speech therapy www.osla.on.ca or to locate one trained in LSVT©, visit the Lee Silverman website www.lsvtglobal.com

Are there alternative treatments that can be beneficial?

After the diagnosis of Parkinson's, sometimes people search for different methods of treating the symptoms. Presently, there is considerable interest in alternative treatments.

When investigating alternative treatments, consider the following:

- **What is the evidence of the effectiveness?** The best evidence appears in peer-reviewed scientific journals. Treatments which have not been put through the rigors of scientific evaluation should be approached with caution.

- **What is the cost of the treatment?** The cost of some treatments is exorbitant and it is not uncommon for a person, desperate for relief, to pour considerable savings into a treatment that is speculative at best.
- **Can the treatment do harm?** The risks associated with any treatment must be clearly explained and completely understood. Of particular concern is whether or not any supplement or other pills can dangerously interact with Parkinson's medication.
- **What is the source of supplement** and how is the potency regulated?

Use extreme caution when undertaking an alternative treatment. Inform your physician before embarking on any alternative treatment.

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