

# P A R K ï N S O N QUÉBEC

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## MEDICATION



Daily  
LIVING

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QUÉBEC

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## MEDICATION

Parkinson's disease is characterized by the death of dopamine-producing cells, a chemical in your brain that, among other things, controls movement. This reduction in dopamine causes the appearance of motor symptoms such as slowness, tremors, stiffness and postural problems.

To this day, there is no cure for Parkinson's disease. Medication can attenuate its symptoms but it cannot stop its progression. Rather, medication helps compensate for the failure in the brain's dopaminergic system.

By taking medication, most people living with Parkinson's disease can manage their symptoms. It is not the sole therapeutic option but it is by far the more efficient. Most drugs have side effects, some may become more inconvenient than others.

Parkinson's disease symptoms vary from person to person. It explains why medication plans must be adapted to your reality. As symptoms change, the type of medication, how often it's taken and dosage will change as well.

### ON A DAILY BASIS

Drug intake requires good organization and proper knowledge from the person living with the disease and their family as well as caregivers.

In the efficiency cycle of medication, we recognize two distinct phases: an "ON" phase, when medication is working well and symptoms are under control, and an "OFF" phase, when medication does not control symptoms as efficiently.

For these reasons, altering the regularity of the medication schedule can have a direct effect on your quality of life and independence. Therefore, medication must always be taken on time, at all times.

You can obtain a medication card, which will help you keep track of all of the medication you take, from Parkinson Québec.

## LEVODOPA

Levodopa is the "gold standard" for treating Parkinson's disease symptoms. It is the most efficient molecule in the treatment of the motor symptoms of the disease. It works by replacing dopamine in the brain. Levodopa is always combined with either carbidopa or benserazide, which help levodopa get into the brain where it is changed into dopamine. Levodopa may be used alone or in combination with other Parkinson's disease drugs.

### Levodopa formulations available in Canada include:

levodopa/carbidopa (Sinemet® and Sinemet®CR)

levodopa/benserazide (Prolopa®)

levodopa/carbidopa with entacapone (Stalevo®)

### Possible side effects:

nausea or vomiting

low blood pressure

hallucinations

(seeing, hearing, feeling and smelling things that aren't there)

sleep problems, drowsiness

dyskinesia, involuntary movements (unpredictable response which normally appears after prolonged use)

For some people, proteins seem to interfere with the way levodopa works. Proteins may affect how the drug is absorbed, therefore, you may benefit from taking your medication 30 to 60 minutes prior to a meal or with a light snack such as fruits, crackers or apple sauce. For more information, see the pamphlet *Daily Living: Levodopa and Proteins*.

Exception: If you experience nausea with levodopa, taking your pills with food can help. Sometimes the nausea will go away after you get used to the drug.



### DOPAMINE AGONISTS

Dopamine agonists imitate the effects of dopamine. They essentially mimic the dopamine molecule, and the brain recognizes them as such. Dopamine agonists may be used as the first medication to treat Parkinson's disease symptoms or in combination with other drugs.

#### Dopamine agonists available in Canada include:

ropinirole (Requip®)

pramipexole (Mirapex®)

bromocriptine (Parlodel®)

rotigotine (Neupro® transdermal patch)

#### Possible side effects:

drowsiness, including sudden onset of sleepiness

impulsive behaviours including uncontrolled eating, compulsive gambling, hyper-sexuality, excessive shopping

#### Contact your physician if you experience any of these, or similar behaviours.

leg swelling

hallucinations

(seeing, hearing, feeling and smelling things that aren't there)

dyskinesia (involuntary movements)

### CATECHOL-O-METHYLTRANSFERASE (COMT) INHIBITORS

COMT inhibitors block an enzyme that breaks down levodopa before it can be turned into dopamine. This allows more dopamine to be available for the brain. COMT inhibitors alone do not help Parkinson's disease – they must be used with levodopa. They prolong levodopa's effectiveness. They can be added to your dose of levodopa if it is not working for long enough (end-of-dose deterioration) or its effectiveness wears off before your next dose.

#### COMT inhibitors available in Canada include:

entacapone (Comtan®)

entacapone, levodopa, carbidopa (Stalevo®)

#### Possible side effects:

nausea

drowsiness

light-headedness

hallucinations

(seeing, hearing, feeling and smelling things that aren't there)

dyskinesia (involuntary movements)

### MONOAMINE-OXIDASE-B (MAO-B) INHIBITORS

MAO-B inhibitors block an enzyme that breaks down dopamine in your brain, prolonging its duration of action.

MAO-B inhibitors may be used to control symptoms in early Parkinson's disease or in combination with other drugs.

#### MAO-B inhibitors available in Canada include:

selegiline (Eldepryl®)

rasagiline (Azilect®)

#### Possible side effects:

interaction with other medications, particularly antidepressants and decongestants

headaches

nausea

hallucinations

(seeing, hearing, feeling and smelling things that aren't there)

dyskinesia (involuntary movements)

flu-like symptoms

### LEVODOPA/CARBIDOPA INTESTINAL GEL (DUODOPA®)

Health Canada approved this method of administering levodopa and carbidopa. Instead of taking a pill, a tube is surgically placed into the small intestine. A pump attached to the tube then delivers the drug in the form of a gel into the small intestine. Treatment is available for patients with more advanced Parkinson's disease or patients who are having trouble managing their symptoms with oral drugs. Duodopa is currently available in Quebec in a limited and controlled fashion.

### AMANTADINE

This drug is used primarily to help reduce dyskinesia (involuntary movements) that may be a side effect of levodopa. It is also an antiviral drug used to treat the flu. Amantadine (Symmetrel®) alone does not help Parkinson's disease symptoms.

#### Possible side effects:

dry mouth

dizziness

nausea

insomnia

purplish discoloration of the skin and swelling of the legs

### ANTICHOLINERGICS

The anticholinergic pills help correct the imbalance of acetylcholine/dopamine ratio observed in Parkinson's disease. They may also help with slowness, tremors and rigidity.

#### Anticholinergics available in Canada include:

trihexyphenidyl (Artane®)

benztropine (Cogentin®)

#### Possible side effects:

dry mouth

confusion, changes in memory, thinking, concentration

constipation

urine retention

blurry vision