

What Do These Medications Really Do?

There are six main classes of medications that are used to treat the symptoms of Parkinson's Disease. Each of these classes of medications uses a different mechanism to work. This handout will detail the major classes of medications, what specific medications are included, and how each class specifically works in the body.

Levodopa:

- **Medications include** : Carbidopa-Levodopa, Madopar, Apodespan, Caramet CR, Lecado, Sinemet, and Duodopa
- **How do they work** : Levodopa is a chemical that your body converts into dopamine in the brain. Taking this medication boosts the level of dopamine that is present in the body.
- Levodopa works great on its own but if you have major side effects, your doctor may prescribe you Carbidopa-Levodopa. The Carbidopa portion of that medication enhances the good qualities of Levodopa but minimizes the negative side effects.
- **What to be aware of** : for some people, protein seems to interfere with how effective their levodopa medication is. It may be helpful to take your medication 30-60 minutes before eating a meal to let your body absorb it correctly.

Dopamine Agonist: a dopamine agonist is a substance or medication that mimics the actions of dopamine in the brain.

- **Medications include :** Mirapexin, Pipexus, Glepark, Oprymeia, Zentiva, Adartrel, Ralnea, Requip, Spiroco, Ipinnia, Raponer, Repinex, Ropilynz, Neupro, Apo-Go, Dacepton
- **How do they work :** these medications mimic dopamine in the brain without being converted
- Dopamine agonists are typically prescribed during the earlier stages of Parkinson's Disease. The dosage will be gradually increased until your symptoms are well controlled.
- **What to be aware of :** dopamine agonists can make you feel sleep, faint, and/or dizzy and they may make you experience some impulsive and compulsive behaviors as well as hallucinations and/or delusions. If these side effects are affecting your ability to participate in daily life, let your health care provider know.

MAO-B Inhibitors: MAO-B is an enzyme that limits that amount of dopamine the brain can produce at one time. By inhibiting this enzyme, the medication allows for increased dopamine production.

- **Medications include :** Azilect, Eldepryl, Zelapar, Xadago
- **How do they work :** these medications help the nerve cells in your brain use the dopamine that you already have more efficiently
- These medications may be used in early Parkinson's when motor symptoms are mild
- **What to be aware of :** while on this medication, you may not be able to take antidepressants or some cold medications due to drug interactions

COMT Inhibitors: COMT is an enzyme that digests or breaks down dopamine. By inhibiting this enzyme, the medication can increase how affective other Parkinson's Medications are.

- **Medications Include :** Comtess, Stalevo, Sastravi, Stanek, Tasmar, Ongentys
- **How do they work :** COMT Inhibitors block an enzyme that breaks down Levodopa. By blocking this enzyme, the Levodopa is able to work longer and more efficiently
- COMT Inhibitors cannot be used to manage Parkinson's symptoms on their own, it must be used in combination with Levodopa. This medication is typically prescribed when Levodopa is not working as long as it should or as well as it should.
- **What to be aware of :** your urine may turn a bright reddish orange color, but this is nothing to be concerned about. You may experience diarrhea for a couple of weeks or months after starting COMT Inhibitors. Tasmar specifically can lead to liver damage so your doctor will regularly monitor your liver function with blood tests.

Amantadine:

- **Medications Include :** amantadine
- **How does it work :** this medication can increase the amount of dopamine that the brain releases
- This medication is mainly used to treat dyskinesias and in combination with levodopa
- **What to be aware of :** over time, the body gets used to this medication and it stops working for some people.

Anticholinergics: this type of medication blocks a chemical called acetylcholine. Acetylcholine is a chemical that plays a role in memory, learning, attention, arousal and involuntary muscle movement.

- **Medications Include :** Kemadrin, trihexyphenidyl, benzhexol
- **How does it work :** blocks a chemical that is produced in the brain that causes an increase in tremors
- These medications are typically only used in younger people with a noticeable tremor. These medications aren't usually prescribed to older people because they are linked to increased confusion and hallucinations.
- **What to be aware of :** anticholinergics can cause memory problems. Your Parkinson's team will monitor you closely to watch for new or worsening memory problems. If taken for a number of years, they can be difficult to come off of and people often experience withdrawal symptoms.