

Treating Parkinson's Maximizing PD Medications



Are you getting the most out of your Parkinson's disease (PD) medications? There are numerous effective medications that can help to ease the motor symptoms of PD. But understanding how they work, what to expect and when to take them can be challenging. This is especially true as PD progresses and additional medications are needed. Understanding your medications can help you to maximize their benefits and curtail their side effects. The listing below represents the major classes of medications that treat the motor symptoms of Parkinson's disease. Keep in mind that just as the experience of PD varies from person to person, so should the medication plan.

Drugs Based on Dopamine

The motor symptoms of PD develop from a lack of dopamine, the chemical messenger that helps control movement. The most commonly prescribed PD medications work by restoring dopamine to the brain or stimulating dopamine receptors. Dopamine itself cannot be taken as a pill because it cannot pass from the bloodstream to the brain. PD medications use strategies to bypass what is called the blood-brain barrier.

Levodopa. Levodopa is a substance similar to dopamine, but, unlike dopamine, can cross the blood-brain barrier. Once in the brain, it is converted to dopamine. Levodopa is the "gold standard" of PD treatment — it is the most effective medication for movement symptoms with the fewest side effects for most people. It is often provided in the form of carbidopa/levodopa (Sinemet®). Other formulations include Parcopa®, Rytary® and the intestinal gel (Duopa™), which is delivered through a tube directly entering the stomach through the abdominal wall. Lastly, there is carbidopa/levodopa/entacapone (Stalevo®).

Catechol-O-methyltransferase (COMT) Inhibitors. These drugs, which must be used in combination with levodopa, help prevent the breakdown of dopamine, and thus help maintain its effects for longer. They include entacapone (Comtan®) and tolcapone (Tasmar®).

Dopamine Agonists. These medications mimic dopamine, activating dopamine receptors. They include pramipexole (Mirapex®), ropinirole (Requip®), rotigotine (Neupro®) patch, and apomor-

phine (Apokyn®), as well as bromocriptine (Parlodel®). Dopamine agonists are longer acting than levodopa and therefore can help to reduce fluctuations in motor function resulting from the "wearing off" of levodopa. They are often prescribed as an initial treatment for younger people with PD.

Monoamine Oxidase B (MAO-B) Inhibitors. In the brain, the enzyme monoamine oxidase B (MAO-B) breaks down dopamine. MAO-B inhibitors, such as rasagiline (Azilect®) and selegiline (Eldepryl® and Zelapar®), slow down this process so that the dopamine stays active longer. They can be taken with levodopa or used alone.

Drugs Not Based on Dopamine

Some less commonly prescribed medications work through routes that do not involve dopamine directly.

Anticholinergics. These drugs affect the chemical messenger acetylcholine. If tremor is troublesome and other medications don't help, you may be prescribed an anticholinergic such as trihexyphenidyl (Artane®).

Amantadine. This medication, one of the oldest PD drugs around, has several effects in the brain. It is used mainly to control dyskinesias.

Maximizing the Benefits of PD Medications

Anti-PD medications can help ease movement, reduce stiffness, ease tremor, improve balance and make it easier to do things that take dexterity, like fastening buttons. Some people find that the medications help them think more clearly and reduce pain. But medications also come with side effects.

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Here are tips for getting the greatest benefit and minimizing side effects.

Find Your Dose. The optimal doses of medications vary from person to person, and generally increase as PD progresses. Pay attention to how medications affect your symptoms, and what changes over time. Work with your doctor to fine-tune your dose.

Take Medications on Time. Early in the course of PD, you may not notice much if you forget a pill or take one late. As PD progresses, however, it becomes increasingly important — critical, in fact — to take medications on schedule. Symptoms are best controlled when medication is timed to maintain a steady level in the body.

Keep a Journal. It can be difficult, during a brief office visit, for your doctor to understand how you react to your medications during the day. It may be helpful to keep a journal in which you record the timing of your medications and how they affect your PD symptoms.

Schedule Meals Around Meds. For some people, as PD progresses, meals can interfere with levodopa, delaying its action and resulting in sudden “off” periods in which the beneficial effects of the medication disappear. That is because protein can compete with levodopa to get from the gut to the bloodstream and brain. It may help to avoid protein-rich foods like meat, fish, eggs and dairy for 30 minutes before, and one hour after, you take your medication, or to take it on an empty stomach.

Treat Constipation. Constipation prevents medications from being absorbed into the body. Unfortunately, constipation itself can be a PD symptom, and PD medications can actually make it worse. To relieve constipation, drink plenty of water, exercise as much as you can, and consider taking a daily laxative for prevention.

Treat Depression and Anxiety. Depression and anxiety profoundly affect how medications work. They are also common nonmotor symptoms of PD. Many people find that their tremor comes back, or they feel slow and stiff, if they become anxious —

even while they are taking levodopa. For PD medications to work optimally, it’s important to treat depression and anxiety.

Tips for Minimizing Side Effects

Just as people get different benefits from levodopa, the side effects can vary too. Here are tips for dealing with some of the most common side effects.

Sleepiness. Reduce medication dose, minimize dopamine agonists, improve nighttime sleep and — if all of these measures fail — consider taking stimulants. Avoid taking selegiline after noon as it can interfere with nighttime sleep.

Nausea. Try taking medication with a non-protein snack such as crackers, or applesauce.

Lightheadedness on Standing. Drink plenty of water, use compression stockings, elevate the head of your bed, increase salt intake (if considered safe by your doctor), reduce your levodopa dose (under a doctor’s supervision), or try medications to elevate blood pressure.

Hallucinations. PD medications can cause visual hallucinations. Reducing or stopping certain PD medications — always under a doctor’s supervision — usually provides relief. Antipsychotic medications such as quetiapine or clozapine may be prescribed.

Impulse Control Disorders. Some PD medications, most often dopamine agonists, have been associated with excessive gambling, shopping and eating, and hypersexuality. Under a doctor’s supervision, these medications can be gradually reduced.

Conclusion: It’s All in the Timing

Drug therapies can safely alleviate the motor symptoms of PD. Don’t delay treatment at the expense of your quality of life. Pay attention to what time you take medications, what effects they have, and when. Work with your doctor to optimize doses and schedules — maximizing the effectiveness of medications can help to ensure that you enjoy the best quality of life.

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If you have or believe you have Parkinson’s disease, then promptly consult a physician and follow your physician’s advice. This publication is not a substitute for a physician’s diagnosis of Parkinson’s disease or for a physician’s prescription of drugs, treatment or operations for Parkinson’s disease.

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