

January 2023



# Moving Along

A newsletter of the Waverly Area  
Parkinson's Disease Support Group

## UPCOMING MEETINGS:

### Parkinson's Support Group

Saturday, January 14

10 a.m. to Noon

Tendrils Rooftop Garden

Amy McKinley of AbbVie Pharmaceuticals will provide an educational presentation on Parkinson's medication. Park in the Red Lot and enter through the door marked "Tendrils" near the pharmacy drive-up window. This event is free and open to all. Masks are optional. Call (319) 352-4961 with questions.

### Exercise Programs at The W

**Delay the Disease:** Exercise Program for People with PD | M, W, F | 10 to 10:50 a.m.

For more information or to sign up, call (319) 352-8311 or go to: [the-w.org](http://the-w.org)

### WHC Parkinson's Singing Group

This group meets Mondays at 10 a.m. in Tendrils Rooftop Garden. This group is **not** meeting on Monday, November 14. For information on how to participate, contact Kara Rewerts by phone at (319) 483-4118 or via email at [KRewerts@WaverlyHealthCenter.org](mailto:KRewerts@WaverlyHealthCenter.org)

### APDA Iowa Presents: Living Well With Parkinson's

Third Thursday of every month | 12 p.m. CST | Via Zoom

Thursday, January 19, 2023: Aging in Place, presented by Sydney Marshman, Occupational Therapist – Happy at Home Consulting.

## **GLOVE SHOWS POTENTIAL TO EASE PARKINSON'S MOTOR SYMPTOMS**

Researchers at Stanford Medicine led by Peter Tass, MD, PhD, are developing a glove aimed at alleviating motor symptoms caused by Parkinson's disease (PD). The device is still in the stage of clinical trial testing, but results from initial pilot studies in roughly a half-dozen participants suggest that it may ease tremors, slowness and stiffness. Understandable, this technology generated a lot of excitement, so what do people in the PD community need to know about the glove and technology as treatment? We've answered a few common questions.

### **How does the glove work?**

In early trials, participants wore a glove on each hand for several hours per day. The gloves deliver light vibration through the fingertips. Study researchers suggest that this stimulation can 'reset' abnormal electrical activity in the brain, which happens in PD.

The gloves are being tested to see if they ease the symptoms of PD. They are not expected or intended to change the course of disease progression.

### **Where can I get a glove?**

As the gloves are still in clinical trial testing, they are not widely available. Further trials are in the works. Experts hope that future work includes a rigorously controlled trial: one in which active treatment is compared to a "sham control" (a glove that looks and feels like the one in development but does not vibrate at specifications intended to ease symptoms) and in which both participants and researchers are "blinded" (unaware of whether a volunteer is getting the active glove treatment or a look alike). This helps researchers fully evaluate the potential benefits of the glove as well as a placebo effect, which can be significant in Parkinson's studies like this. You can use the Fox Trial Finder, Michael J. Fox Foundation's (MJFF) online clinical trial matching tool, to explore this and other Parkinson's studies. You can also find study details on [clinicaltrials.gov](https://clinicaltrials.gov).

Researchers have suggested that if trials are successful, they plan to seek U.S. Food and Drug Administration (FDA) clearance for the glove. Until trials are completed, it is difficult to lay out a timeline for that process.

### **Does MJFF fund tech treatments like this one?**

While MJFF is not directly involved in the ongoing clinical trial for the glove, MJFF has funded Tass and their earlier work on this stimulation concept.

MJFF has also supported other projects testing vibration as a tool to treat symptoms. One project studied the potential of vibrating socks to reduce freezing of gait; another tested a lightweight, portable device that you place inside a shoe with a similar goal. MJFF has funded development of a wireless device to help with swallowing difficulties, which can, but don't always, happen in people with PD. The device is placed on the upper chest, and it gently vibrates to remind people to swallow more and with greater force, which strengthens the swallowing muscles, improves swallowing function long term and reduces the risk of choking.

MJFF is also actively funding other projects to determine if and how technologies may help ease or measure Parkinson's symptoms. For example, we've also supported work on a wall-mounted device, which bounces radio waves off a person to detect movement, allowing for an at-home measurement of gait changes.

### **Beyond the glove**

The glove illustrates how technology might accelerate our journey to improve the lives of people with Parkinson's. While this study is not currently recruiting, many trials for PD are, and participating in research is one of the best ways you can contribute to the PD community. MJFF continues in their urgent mission to improve the lives of people with Parkinson's disease, and they are always seeking out the next technological advances that could make a difference, including vibration-based therapies.

Source: <https://www.michaeljfox.org/news/glove-shows-potential-ease-parkinsons-motor-symptoms>



## **PARKINSON'S DISEASE - MEDICATIONS**

Medications may help you manage problems with walking, movement and tremor. These medications increase or substitute for dopamine.

People with Parkinson's disease have low brain dopamine concentrations. However, dopamine can't be given directly as it can't enter the brain.

You may have significant improvement of your symptoms after beginning Parkinson's disease treatment. Over time, however, the benefits of drugs frequently diminish or become less consistent. You can usually still control your symptoms well.

Medications your health care provider may prescribe include:

### **Carbidopa-levodopa**

(Rytary, Sinemet, Duopa, others), Levodopa, the most effective Parkinson's disease medication, is a natural chemical that passes into your brain and is converted to dopamine.

Levodopa is combined with carbidopa (Lodosyn), which protects levodopa from early conversion to dopamine outside your brain. This prevents or lessens side effects such as nausea.

After years, as your disease progresses, the benefit from levodopa may lessen, with a tendency to wax and wane ("wearing off"). You may also experience involuntary movements (dyskinesia) after taking higher doses of levodopa. Your health care provider may lessen your dose or adjust the times of your doses to control these effects.

Unless told otherwise by your health care provider, carbidopa-levodopa is best taken

on an empty stomach if you have advanced Parkinson's disease.

### **Inhaled carbidopa-levodopa**

Inbrija is a brand-name drug delivering carbidopa-levodopa in an inhaled form. It may be helpful in managing symptoms that arise when oral medications suddenly stop working during the day.

### **Carbidopa-levodopa infusion**

Duopa is a brand-name medication combining carbidopa and levodopa. However, it's administered through a feeding tube that delivers the medication in a gel form directly to the small intestine.

Duopa is for patients with more-advanced Parkinson's who still respond to carbidopa-levodopa, but who have a lot of fluctuations in their response. Because Duopa is continually infused, blood levels of the two drugs remain constant.

Placement of the tube requires a small surgical procedure. Risks associated with having the tube include the tube falling out or infections at the infusion site.

### **Dopamine agonists**

Unlike levodopa, dopamine agonists don't change into dopamine. Instead, they mimic dopamine effects in your brain. Dopamine agonists aren't as effective as levodopa in treating symptoms. However, they last longer and may be used with levodopa to smooth the sometimes off-and-on effect of levodopa.

Dopamine agonists include pramipexole (Mirapex ER), and rotigotine (Neupro, given as a patch). Apomorphine (Apokyn) is a short-acting injectable dopamine agonist used for quick relief.

Some of the side effects of dopamine agonists are like the side effects of carbidopa-levodopa. But they can also include hallucinations, sleepiness and compulsive behaviors such as hypersexuality, gambling and eating. If you're taking these medications and you behave in a way that's out of character for you, talk to your health care provider.

## MAO B inhibitors

These medications include selegiline (Zelapar), rasagiline (Azilect) and safinamide (Xadago). They help prevent the breakdown of brain dopamine by inhibiting the brain enzyme monoamine oxidase B (MAO B). This enzyme metabolizes brain dopamine. Selegiline given with levodopa may help prevent wearing-off.

Side effects of MAO B inhibitors may include headaches, nausea or insomnia. When added to carbidopa-levodopa, these medications increase the risk of hallucinations.

These medications are not often used in combination with most antidepressants or certain narcotics due to potentially serious but rare reactions. Check with your health care provider before taking any additional medications with an MAO B inhibitor.

## Catechol O-methyltransferase (COMT) inhibitors

Entacapone (Comtan) and opicapone (Ongentys) are the primary medications from this class. This medication mildly prolongs the effect of levodopa therapy by blocking an enzyme that breaks down dopamine.

Side effects, including an increased risk of involuntary movements (Dyskinesia), mainly result from an enhanced levodopa effect. Other side effects include diarrhea, nausea or vomiting.

Tolcapone (Tasmar) is another COMT inhibitor that is rarely prescribed due to a risk of serious liver damage and liver failure.

## Anticholinergics

These medications were used for many years to help control the tremor associated with Parkinson's disease. Several anticholinergic

medications are available, including benztropine (Cogentin) or trihexyphenidyl.

However, their modest benefits are often offset by side effects such as impaired memory, confusion, hallucinations, constipation, dry mouth and impaired urination.

## Amantadine

Health care providers may prescribe amantadine (Gocovri) alone to provide short-term relief of symptoms of mild, early-stage Parkinson's disease. It may also be given with carbidopa-levodopa therapy during the later stages of Parkinson's disease to control involuntary movements (dyskinesia) induced by carbidopa-levodopa.

Side effects may include a purple mottling of the skin, ankle swelling or hallucinations.

## Adenosine receptor antagonists (A2A receptor antagonist)

These drugs target areas in the brain that regulate the response to dopamine and allow more dopamine to be released. Istradefylline (Nourianz) is one of the A2A antagonist drugs.

## Nuplazid (Pimavanserin)

This drug is used to treat hallucinations and delusions that can occur with Parkinson's disease. Experts aren't sure how it works.

Source: <https://www.mayoclinic.org/diseases-conditions/parkinsons-disease/diagnosis-treatment/drc-20376062>

*“Enter this new year with a gratitude for this new chance to create your dreams.”*

– Avina Celeste

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