You come to the point that the patient requires symptomatic treatment, and you've agreed that the best treatment for this patient, and frankly, for probably most other patients you will see diagnosed with Parkinson's disease, is to start with carbidopa/levodopa. It's a compound name, carbidopa/levodopa, but levodopa is the active ingredient, because that is transformed into dopamine when it gets to-- when it crosses the blood-brain barrier.

Carbidopa really just stays in the periphery, and it is there as an anti-nausea medication. And so that is to make carbidopa or levodopa more tolerable. So you decide. The smallest dose is 25 over 100 milligrams. That means it's 25 milligrams of carbidopa and 100 of levodopa.

Normally I start with one tablet three times a day. Now, in sensitive individuals, maybe in more frail patients, you might want to start with a half a tablet three times a day. In a rather strong patient in his or her 50s or early 60s with no other comorbidities, a strong GI system, you may want to start with one tablet three times a day.

Now, the pharmacist will always say, don't take it with food because of the protein interaction, but in the beginning that's not really a concern. My bigger concern is whether they'll tolerate the drug or not. So I actually tell them to take it with breakfast, lunch, and dinner-- one, so that they don't forget it, because no one forgets to eat, and two, so that they can tolerate the medication. Over time, if they develop motor fluctuations or some sensitivity, we can take it-- or give them instruction to take it without food. But for now I'd take it with food, one tablet three times a day.

Now, Parkinson's disease is a progressive illness. It is not a static disorder, like stroke or some other illnesses. And therefore, you do have to follow them over time, because that can change. As their disease progresses, their requirement for levodopa dosage will change. In fact, almost universally, the time will occur where they will need more levodopa doses.

And so usually we would increase to four times a day. I think more than four times a day becomes a compliance issue, but if they're disabled enough, maybe you can push to five times a day. Now, I have exceptional patients who are on it six times, or seven times a day, or around the clock, but usually three to four times a day would be convenient, five times a day a little bit of an exception.

As the disease progresses, they might be starting to experience motor fluctuation. The most common motor fluctuation type is that of wearing off, when the symptoms recur, when the medication effect do not last or no longer lasts until the next dose. And it falls short, so that's what we call wearing off. And in that case, you have the option of either shortening the duration between doses to a certain extent, or maybe increasing the dose of levodopa so that it lasts a little bit longer, or adding what we call a levodopa extender-- so things that prolong the duration of effect or the half-life of levodopa, such as MAO-B inhibitors, rasagiline or selegiline; COMT inhibitors, like entacapone; and other FDA-approved products.

So in the beginning, though, we start with levodopa. You start low and you go slow. That's always our general rule. Watch for the most common-- and warn your patients of the most common side effects, which would be nausea and vomiting, a little bit of sleepiness in the beginning, some lightheadedness. Those are the most common ones, and we warn them that these are transient. Of course, if it's too much, they should call you. And maybe you need to decrease the dose a little bit.

If it's just a little-- not that significant, if they can weather the storm, it'll usually go away on their own. It's nice to have a check on them in two months or three months at the very latest so that you can go to the next step higher if they need it. Or you can stay there if they're quite happy with where things are going.

I also tell my patients that not all symptoms of Parkinson's disease will respond to levodopa. The two biggest symptoms that will respond to levodopa would be the rigidity and the bradykinesia. Now, its response to tremor is a little bit less consistent. Sometimes it works like magic and sometimes it could be medication-resistant, or sometimes it's somewhere in the middle. The unfortunate motor symptom that do not respond well-- does not respond well to levodopa would be gait instability, unfortunately.

So of the four motor symptoms of Parkinson's disease, two of them-- rigidity and bradykinesia-- respond very well. One, tremor, may or may not respond as well. And one, which is gait instability, traditionally do not respond-- or does not respond very well. And physical therapy would be your best treatment to address that problem.