

Q & A with Dr. Cherian Karunapuzha

Q: What is a CAT scan?

It is an imaging tool done alongside an MRI of your brain. The screen shows the microscopic damage consistent with Parkinson's disease and related disorders. Think of an MRI as looking at the brain close up like a photograph and the CAT scan looking more microscopically at the integrity of the nerves which shoot out dopamine. As I said earlier, the nerves which shoot out dopamine are getting preferentially damaged and the nerves receiving dopamine are relatively healthy. CAT scans specifically look for this damage in those kinds of nerves using a special kind of dye. The CAT scan has about a 90% chance of ruling in Parkinson's disease and ruling out Parkinson's disease as well. Often, it is used as an adjunct to help with diagnosis especially in patients with very subtle symptoms.

Q: I have a tremor. How do I know if it's because of Parkinson's or another neurological condition?

You can have essential tremor for years before you manifest Parkinson's disease. There is no rule that states that just because you have one brain disorder you cannot download another brain disorder on top of that. Similarly, somebody asked about Tourette syndrome and Parkinson's disease, and again the same rules apply. However, if the onset of Parkinson's disease is at a relatively young age, we would like to screen for genetic disorders which could cause both of them. Also, we would screen for drug-induced parkinsonism which many times is caused because of the meds used for the tics in Tourette syndrome.

Q: What are the first symptoms of Parkinson's?

As I said earlier, Parkinson's brews in you for years and so many times your early symptoms are non-physical or non-motor symptoms such as constipation, talking in your sleep, lack of smell, mood fluctuations, etc. We usually make the diagnosis of Parkinson's based on physical signs and whichever year the first physical symptoms occur, that is usually considered as the first year of onset in terms of delineating milestones for that patient.

Q: My Sinemet seems to wear off quickly, should I take the next dose earlier?

A lot of times, initially, when you first start to wear off as part of your early motor fluctuations, you can easily take your next dose of Sinemet earlier. But, as you advance with unpredictable fluctuations, where your major limitation is your stomach transit, taking the next dose earlier may not help because it too has to go through the same bottleneck and delays occur. We are understanding more about gut microbiomes and how it can impact the onset of Parkinson's disease. Once you've already been diagnosed with Parkinson's, I'm not sure if the microbiome would make any major difference. One issue with your gut slowing down is that the gut bacteria, Flora, can grow excessively (as it is not being pushed out), to where it can limit absorption of nutrients and many times the meds itself. This is why some patients notice that when they take antibiotics for an infection their levodopa lasts longer or absorbs better. The antibiotics are probably tearing off the excess gut bacteria. And it is for the same reason I prefer not to use probiotics (as it could add to the excess bacteria) in more advanced Parkinson's patients as a way to treat their constipation.

Q: When should I take Levodopa?

Because amino acids (which are the components of protein) in your meal competes with levodopa absorption in your gut, we like to say that levodopa should be taken on an empty stomach at least 30 minutes to an hour before or after your meal. Levodopa can cause nausea when taken on an empty stomach and so until you get used to it, we sometimes suggest taking it with food that doesn't have that much protein like orange juice or saltine crackers. It can also cause nausea if it gets stuck within the folds of your stomach. This is why we talked about taking the medication with a tall glass of water to flush it past the stomach into the first part of your small intestine.

Q: Can Parkinson's be misdiagnosed?

Many times, early tremors can be misdiagnosed as essential tremors, which is a different movement disorder. Early symptoms of a frozen shoulder could be misdiagnosed as a rotator cuff injury. The more pronounced your symptoms become, the easier it becomes to diagnose, which is why I tell our students, the last neurologist to see the patient over the years, is always the smartest looking neurologist to the patient - as he/she is able to arrive at the correct diagnosis very easily.