

Well, the question of how we diagnose Parkinson's disease is really relevant because it can be challenging at times. The unfortunate reality is that we actually don't have a test for Parkinson's disease to really confirm it, unlike say diabetes or pneumonia. You have a chest X-ray, and you'll notice some opacity in the lungs, and then you could culture it and you could diagnose what the pathology is that's causing the pneumonia.

In Parkinson's disease we don't have such a thing. It is mainly a clinical diagnosis. So we hear the symptoms. We look at the signs, and if they fit the potential diagnosis of Parkinson's disease, then it likely is Parkinson's disease. The other challenge is that the presentation of Parkinson's is quite varied, and the most common one, and probably the most easily recognizable would be a resting tremor.

But 20% of Parkinson's patients would not present with a resting tremor, but they could be noted to be stiff, or what we call rigid. They can be slow or what we term as Bradykinetic. They could have a shuffle in their gait. They could be dragging their right or left leg. In most, but not all cases Parkinson's disease affects one side of the body more than the other. And so because of this very varied spectrum of presentation, it can be challenging and Parkinson's patients could be misdiagnosed with arthritis, maybe a shoulder injury, or essential tremor or something else.

Now there are neurologists and clinicians who will do some tests for Parkinson's disease. Some will get an MRI. Some might get a blood test. But those tests are not to rule in Parkinson's disease, but really to rule out potential mimickers of Parkinson's disease. Strokes can cause Parkinsonism. Some brain tumors, brain infections can cause Parkinsonism. And they may have some structural abnormalities on imaging. And so sometimes we get them, but it's really to rule out other causes of Parkinsonism, rather than to rule in Parkinson's disease.

Now there is a procedure called a DAT scan, or a dopamine transporter spec scan and but that is not still specific for Parkinson's disease. It is positive or abnormal in all neurodegenerative Parkinsonisms, and therefore it is somewhat helpful in the scenario where you're trying to rule out essential tremor versus Parkinson's disease. Then a DAT scan might be helpful because a positive scan would lean towards Parkinson's disease, and a negative scan would lean towards essential tremor, which was the other condition you were trying to rule out.

But if your question is this Parkinson's disease or is this an atypical Parkinsonism, such as multiple systems atrophy or progressive supranuclear palsy or dementia with Lewy bodies then the DAT scan is not going to be helpful because it will be positive for all those conditions you are trying to consider.

So it remains a challenge because it is really a combination of a clinical feel and historical testimonies and also really your physical examination. And tests, as I mentioned, are really there to just rule out potential mimickers of Parkinson's disease.