Parkinson’s Disease: General Information

Does PD come in stages? If so, how many stages?

**Hubert Fernandez, MD:** Staging provides an artificial classification of a patient's illness severity but, in reality, that depends on the individual’s disability from his or her symptoms. To answer your question, PD can be staged as mild/moderate or advanced. There is also a five-stage classification:

- **Stage I:** Parkinsonian symptoms are contained or localized to only one side of the body.
- **Stage II:** Parkinsonian symptoms are seen on both sides of the body.
- **Stage III:** Parkinsonian symptoms are seen on both sides of the body, plus there are some balance and gait problems.
- **Stage IV:** Balance and gait problems are more advanced, but the patient can still stand and walk unaided.
- **Stage V:** The patient is either wheelchair-bound or bed-bound unless otherwise aided.

How does PD affect the eyes?

**Hubert Fernandez, MD:** In general, PD patients have shown some ophthalmologic problems in formal testing, notably with depth perception, color sensitivity and contrast sensitivity. However, most of these were subclinical, meaning they were evident only in specialized eye examinations. Clinically, PD patients are generally asymptomatic from an ophthalmologic standpoint.

Is there a PD cough? My brother had PD, and he had this certain cough with its own rhythm early in life.

**Hubert Fernandez, MD:** In general, there is no characteristic cough with PD. However, Parkinson’s patients can have swallowing problems and choking spells that make them cough. When patients choke often, it needs to be taken seriously because they are at risk for developing aspiration pneumonia. A swallowing evaluation is needed.

My mother and father had PD. Is PD heredity?

**Hubert Fernandez, MD:** Most PD is not hereditary. However, about 5 percent to 10 percent of cases can be hereditary. Most instances of hereditary PD occur before age 50.

I have had an MRI that indicated “white spots” of unknown etiology. Would this indicate a susceptibility to PD if my mother has PD?
Hubert Fernandez, MD: Not necessarily.

What are the cognitive problems related to PD?

Hubert Fernandez, MD: Typically, the first symptom of cognitive problems in PD is what we call the "tip of the tongue syndrome." Patients have some naming difficulties and cannot find the exact word, followed by memory problems and forgetting the names of friends they have had for a long time. As the disease progresses, some patients develop what is called executive dysfunction, which means they have problems understanding or following complex commands.

What was done for Michael J. Fox that helped him with symptoms and his PD?

Hubert Fernandez, MD: My apologies. Because I am not his doctor, I do not know what has been done recently.

Is the DNA test for PD easily available now to find the 5 percent to 10 percent of us with the gene mutation?

Hubert Fernandez, MD: To date, we have not identified all the gene mutations for PD. Therefore, I am not a big fan of gene testing for this disorder. A negative gene test does not necessarily mean the patient is free of familial PD. Nonetheless, the few gene mutations we have identified are easily tested. You have only to ask your neurologist.

Are there advances from stem cell research for PD?

Hubert Fernandez, MD: Yes, but one needs to be careful about participating in this research. Make sure you are in a reputable institution. There are still many things we don't know about stem cell research, although I agree that this is a promising treatment. The best source for any reputable study on stem cell research is www.clinicaltrials.gov.

Medications

Is there an antidepressant that is best for Parkinson’s disease (PD) patients?

Mayur Pandya, DO: Most first-line antidepressants are well tolerated in PD. Many of these antidepressants have specific properties that can be utilized to target specific symptoms. Therefore, the choice of a particular antidepressant is unique to each patient.

What is the status of patches for the treatment of PD?
Hubert Fernandez, MD: The Food and Drug Administration still has not approved release of the rotigotine patch for PD. We hope to get an update from the manufacturer of this medication within the next few months.

When you have just diagnosed a patient with PD, what reasons would cause you to choose Sinemet® over the new agonist drugs, or vice versa?

Hubert Fernandez, MD: Sinemet, or carbidopa-levodopa, is still the best drug we have for PD. Therefore, when a patient has significant symptoms and needs immediate relief, it is often my first choice. However, early use of Sinemet, especially at high doses, has been associated with motor fluctuations. For this reason, if the symptoms are milder or the patient is rather young, I tend to reserve Sinemet for later.

Are there other nonsurgical options available for tremors that do not respond to Sinemet?

Hubert Fernandez, MD: Several medications can alleviate tremors in PD, though none of them comes with a guarantee. Medications to try include higher doses of Sinemet, Mirapex, other dopamine agonists, antidepressants such as mirtazapine and even some antipsychotic medications such as clozapine.

What is the newest medication? I am on Stalevo® now. Is there something else?

Hubert Fernandez, MD: We now have long-acting formulations of dopamine agonists such as ropinirole and pramipexole. We are awaiting approval for the return of the rotigotine patch. We also have rasagiline. We are testing several other new compounds for PD.

I am taking amantadine two times per day. Where does this rank?

Hubert Fernandez, MD: Amantadine can be a good medication for early PD. However, its efficacy easily wears off, so it often needs to be supplemented with another PD medication. The principal use of amantadine in PD today is for symptomatic treatment of dyskinesias.

I have no positive results from any PD medications. Does this mean I do not have PD, but do have parkinsonism? Are there different medications for parkinsonism vs. PD?

Hubert Fernandez, MD: You could, indeed, be suffering from an atypical source of parkinsonism rather than the regular PD. However, 15 percent of PD patients do not respond well to PD medications. Also, you need to be careful before concluding that you have no positive results from PD medications. Sometimes, the medication works but the side effects far outweigh the benefits. It’s also possible that a therapeutic dose was never achieved, or the
expectations are unreasonable. Finally, sometimes the true effect is realized only when PD medications are discontinued.

**Does Mirapex® have a noticeable effect on lowering blood pressure? I take 5 mg and have frequent light headaches, including passing out on two occasions. Could it be caused by Mirapex?**

**Hubert Fernandez, MD:** Definitely. Dopamine agonists such as Mirapex can, indeed, lower blood pressure. I would try reducing the medication dosage to see if this gives you some relief. If you need to take the Mirapex, there are medications that can increase your blood pressure so that you don't pass out. Please see your neurologist regarding this matter.

**Is carbidopa best taken before or after meals? How much protein is too much when taking carbidopa with meals?**

**Hubert Fernandez, MD:** For most patients, it will not matter whether they take the medication with or without meals. In general, if my patients complain of nausea, I tell them to take their medication with meals. However, if they describe symptoms of wearing off, when the medication does not last until the next dose, then I recommend that they take the medication either a half-hour before meals or two hours after meals. With patients who are sensitive to protein, I tell them to save the protein for dinnertime and maintain a low-protein diet for breakfast and lunch.

**Surgery**

**What precautions does one need to take after (DBS) surgery?**

**Milind Deogaonkar, MD:** Immediately after surgery, routine wound care is required. Patients are told not to lift anything heavy or engage in rigorous activity for four weeks. In the long term, they cannot undergo MRIs and, before any additional surgical procedure, they must tell the surgeon they have had DBS so that the DBS equipment can be turned off properly during surgery.

**Do you need PD medications after DBS surgery?**

**Milind Deogaonkar, MD:** Yes, most of the time you see about a 50 percent reduction in medications, but you still need them.

**Are there MRI or hot tub restrictions for patients who have undergone DBS surgery?**
Milind Deogaonkar, MD: In the long term, patients cannot undergo MRIs. I am unaware of any hot tub restrictions for DBS patients.

**Lifestyle**

How long should a PD patient work a full-time job, and will working full-time affect the progress of the disease?

Mayur Pandya, DO: The decision to continue employment is personal and takes into account many individual factors. Patients should investigate possible job accommodations or part-time employment when full-time work is no longer feasible. Continued employment can provide a therapeutic advantage because it helps patients maintain their independence and keep up social contacts. It also fosters a sense of purpose and productivity.

Are there any foods or vitamins/minerals that can be helpful in PD?

Hubert Fernandez, MD: We are testing several minerals and compounds to see if they are helpful or if they can slow PD progression. Examples include Coenzyme Q10 and creatine. We know that vitamin E is not helpful for PD.

How many days per week is exercise optimal for a PD patient?

Hubert Fernandez, MD: There are no rules on the duration and frequency of exercise for PD patients. I generally tell people to exercise as regularly as they can, preferably daily or every other day. Make your exercise aerobic and somewhat vigorous. Try to sweat as much as possible. Do your exercises for 30 to 45 minutes. Lastly, be safe when you're exercising to avoid falls.

What are some good tips for adult children supporting their parents with PD?

Hubert Fernandez, MD: The best advice I can give is to learn as much as you can about PD. Several not-for-profit organizations are committed to providing proper education for PD patients and their caregivers; for example, the National Parkinson Foundation, the American Parkinson Disease Association, and the Parkinson’s Disease Foundation.

Is there any way to prevent getting PD?

Hubert Fernandez, MD: We don't yet have conclusive evidence of interventions that can prevent PD. However, we have some data that people who exercise regularly are less likely than those who don't to develop PD. Also, we have
some data that people who smoke, use nonsteroidal anti-inflammatory medications or drink coffee are less likely to develop PD.

Parkinson’s Disease and Other Disorders

What is the link between schizophrenia and PD?

**Mayur Pandya, DO:** In general, schizophrenia is considered a condition of excess dopamine, while PD is a condition of low dopamine. Although there is no connection between them, treatment of one may induce symptoms that appear similar to (but not consistent with) the other. For example, treatment of PD with medications that stimulate dopamine receptors may induce hallucinations or delusions. Similarly, treatment of schizophrenia with medications that block dopamine receptors may induce parkinsonism (not Parkinson’s disease).

Can you discuss what to expect for a patient with a diagnosis of PD with Lewy body disease?

**Hubert Fernandez, MD:** Patients with Lewy body disease can present similarly to patients with PD. This means they have the same tremor, stiffness, slowness and balance problems seen in PD. However, patients with Lewy body disease also have early cognitive impairment. This means they have memory loss and concentration difficulty much sooner than do patients with PD. Because of this, many need to be treated for their mental as well as motor impairments.

What is the difference between PD and parkinsonism?

**Hubert Fernandez, MD:** Parkinsonism is the general condition in which a patient has slowness, stiffness and tremor at rest. There are several sources of parkinsonism, such as stroke, brain infection, brain tumor or medication side effects. The most common cause of parkinsonism in the United States is PD.

How do you address parkinsonism due to medication, induced vs. nonidiopathic? Is the recommended treatment path the same as for idiopathic PD?

**Hubert Fernandez, MD:** If we suspect that a patient has drug-induced parkinsonism, the first thing we do is discontinue the offending medication. Typically, we allow six months for the parkinsonian features to improve. If the parkinsonism resolves, then we assume that the patient has drug-induced parkinsonism. If the symptoms persist, then we generally conclude that the patient may, indeed, have idiopathic PD.