Depression in Parkinson disease

Kevin J Black, Washington University School of Medicine
Many patients with Parkinson disease develop depressive symptoms severe enough to discuss with their physician. Below I will address some of the questions we hear from patients and families about depression in Parkinson disease.

### Is this a big problem?

Roughly 40% of PD patients develop a degree of depression that requires medical attention. We all know that when you feel bad everything seems worse. People with depression are more likely to notice their bodily symptoms and more likely to feel that they can’t do what they would like because of them. More importantly, major depression is a miserable illness. For many patients, the depressive symptoms are a bigger problem than the trouble moving.

### What can you do about depression in PD?

This depends on the pattern of the depressive symptoms. Some of these patterns (syndromes) are described below. A physician experienced in PD can help you sort these out.

**Medication-related mood fluctuations:** If you predictably feel down, sad or anxious when your Parkinson medicine wears off, but fine (or even a little “high”) the rest of the day, this is a known complication of PD. It affects perhaps 5-10% of people with PD, though many people have not heard of it. For these dose-related mood fluctuations, the ideal treatment is to attempt to smooth out your anti-PD medications’ effect throughout the day. This is done on an individual basis with your doctor, but some of the available strategies include larger doses, addition of a medicine like selegiline or tolcapone that slows the metabolism of levodopa, or use of a long-lasting medication like slow-release carbidopa-levodopa or a dopamine agonist.

**Easy crying:** Fairly commonly, people with early PD notice that they cry more easily “out of the blue” at movies or at other times, even if they’re not really sad. Less often people also find themselves laughing when nothing is very funny. This pattern of easy crying is probably due to loss of dopamine input to the part of the striatum that controls the brainstem, where our laughing and crying reflexes are located. It usually responds to PD medications or to a rather low dose of an antidepressant.

**Apathy:** Many people with PD lose interest in things and feel unmotivated. Often this comes with other symptoms of major depression, and then the depression should be treated first. Other times the apathy comes on its own, without other features of major depression. Often the family says, “he looks depressed,” but the patient says no and is content to just sit there most of the day not doing anything much. In this case, apathy is a symptom of PD. Sometimes it responds to increasing the PD medications.

**Steady sadness:** If you are sad or disinterested in things most of the day, nearly every day, for weeks on end, you may have major depression. This is a real medical illness and should be treated. About one in four PD patients has major depression. In my opinion, you deserve specialty care from a psychiatrist if you are depressed and any of the following apply: you are not better after 4-6 weeks of any treatment, you are disabled by your depression, you are thinking about suicide, someone in your family has manic-depressive illness, you have hallucinations, or you wish to be treated with counseling rather than with medications. There are many treatment options for depression in people with PD. Usually we add an antidepressant medication. Recently several studies have shown that depression in PD benefits from various antidepressants.

The most commonly used antidepressants in PD include SSRIs (e.g. selegiline, escitalopram), SNRIs (e.g. venlafaxine, duloxetine), and mirtazapine. Most PD patients tolerate these medications well. If you are taking an MAO inhibitor (selegiline or rasagiline), you should discuss a side effect called serotonin syndrome with your doctor before starting an SSRI or SNRI. However, many patients take both without noticing any problems. It often takes 4-6 weeks of an adequate dose to see complete results. Many patients also benefit from expert counseling, say every week or two for 2-3 months. Most people are helped by one of the foregoing options, but if not, we have other tricks up our sleeves. Recently a specific kind of short-term counseling (cognitive-behavioral therapy) was proven to be helpful for major depression in PD. Some patients benefit from a hospital stay. The most effective treatment for major depression is ECT (electroconvulsive therapy). Although ECT has had a lot of bad press, most criticisms are seriously out of date. Modern ECT is one of the safest medical procedures and even reduces parkinsonism temporarily. The bottom line is that most PD patients with major depression can be treated successfully, one way or another.

**Normal sadness:** If you get down sometimes, feel frustrated with your symptoms and how they affect your life, and have trouble falling asleep from time to time because you are thinking about the real problems in your life, but you are fine most of the day, most days, and you don’t have one of the syndromes described above, this is not necessarily an illness. No one has a corner on how to treat it, but answers include talking to friends, family, or religious leaders about how you feel; doing things you usually like; and picking up new hobbies, work or volunteer activities (an occupational therapist can be very helpful in this regard). Professional counseling may also be helpful.
What causes depression in PD?

Experts talk about three possibilities.

1. It is just a coincidence since both Parkinson disease and depression are common.

2. We already know something goes wrong with the brain in PD, and since the brain is what makes us happy or sad, depression is just another symptom of PD.

3. Of course, people get sad. Who would want to have a physical illness?

In an individual person, we cannot usually sort out these three possibilities. However, research can help us figure it out in general. Here are my conclusions from my experience and from published research.

1. Some people are going to be depressed with or without PD. They may have already had major depression earlier in their life, or it may run in their family.

2. In many people, depression is clearly a symptom of PD. Reasons for saying this include that major depression is more common in PD than in people with non-brain diseases like arthritis. It happens equally in men and women with PD whereas generally depression is twice as common in women. Its symptoms are different from those of ordinary major depression in certain ways. It can start for the first time late in life when things are going well, and the person has weathered many life storms without depression, and it can start before the person even knows he has PD.

3. Almost everyone with PD has mild sadness and frustration from time to time, and that may be normal. But when the depression is there most of the time or is interfering with your life, you deserve expert help.

This is an update of an article originally published in our newsletter in 1998.