AMERICAN PARKINSON DISEASE ASSOCIATION
Strength in optimism. Hope in progress.

Depression and Parkinson's Disease

Parkinson's disease (PD) is generally considered a neurological disorder. However, because of the frequency of depression and other psychiatric complications, PD can also be considered a neuropsychiatric disease. In fact, James Parkinson himself observed in 1817 that depression is commonly associated with PD.

Depression

Depending on the type of assessment performed, the data available suggest that at any given time, 20 to 40 percent of individuals with Parkinson's disease are experiencing a depression of some type. This is a higher rate than that found in the general population.

Symptoms of depression may include persistent sadness, loss of interest in formerly pleasurable activities, changes in appetite, and feelings of helplessness or hopelessness. Depression can drastically reduce quality of life and increase care partner burden.

Diagnosing depression in PD can be difficult because of the overlap between symptoms of depression and symptoms of PD. For example, the biological symptoms typical of depression, such as low energy, insomnia or excessive sleep, weight loss, diminished sexual function and an emotionless face can be directly related to the neurologic changes caused by PD. These symptoms are not necessarily evidence of depression, though they are likely to be present in the depressed person with PD. Conversely, depression causes a slowing of both thought and movement (called psychomotor slowing), which may be mistaken for a symptom of PD, rather than evidence of depression.

Depression can arise as a response to any disabling chronic illness (called reactive depression). However most researchers believe depression is an intrinsic part of PD in many cases, and is caused by the same neurological changes that cause the motor symptoms. This notion is supported by the fact that sometimes depression precedes the diagnosis of PD. Depression in PD may be a combination of both reactive depression and a direct effect of the disease on the brain. Regardless of its cause, depression should be recognized and treated.

Treatment

Treatment of depression in PD begins with a review of all medications, both for PD and other conditions. Optimizing anti-PD medications may by itself help with depression. Some PD medications may have an antidepressant effect of their own, including the dopamine agonists. Dopamine agonists may be helpful in particular for persons with PD who experience "on-off" motor fluctuations, with their depressive symptoms being related to the "off" periods.

Antidepressant medications may be helpful. The selective serotonin reuptake inhibitors (SSRIs: e.g., Zoloft®, Paxil®, Celexa® and others) are prescribed most often in persons with PD with depression. In general, the SSRIs are safer and better tolerated by persons with PD than the tricyclic antidepressants (TCAs: e.g., Elavil®, Tofranil®, Pamelor® and others). The SSRIs have fewer cardiac and cognitive side effects and in addition, they can effectively treat anxiety and pain, which also are common in persons with PD. When the use of an antidepressant is considered in a person with PD, its potential side effects and interactions with PD drugs must be weighed against the effects of the depression itself.

Research studies have shown that PD symptoms can worsen as a result of SSRI use, but this adverse effect occurred only in a small minority of persons with PD, and the effect was reversed after discontinuation of the medication. The combination of selegiline and SSRIs could potentially result in a deadly serotonin syndrome. Be sure to talk with

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your doctor before starting an SSRI if you are taking selegiline.

Non-pharmacologic approaches to depression in PD may include increasing exercise, improving sleep, and psychological counseling, such as cognitive behavioral therapy (CBT). Non-pharmacologic approaches can help to improve mood, quality of life, and health outcomes. In one study, those individuals with the most severe depression seemed to benefit the most from CBT. The use of coping strategies and other techniques for managing grief and other emotional distress can be effective in this context.

Attending a Parkinson support group, either in person or online, can be very useful. The growing trend of online support groups may serve persons with PD well. Communicating with a group via computer allows one to access support without leaving the home. For individuals who have difficulty typing, a friend or spouse could possibly do the computer keyboard typing. A study in California found that participation in an online support group that included professional facilitators positively affected mood and quality of life in a group of people with PD.

In non-demented persons with PD, electroconvulsive therapy (ECT) can be an effective choice for depression, when other treatments have failed. This treatment requires close management by a psychiatrist.

Other neuropsychiatric aspects of PD

People with advanced PD may develop delusions (thoughts not based in reality), hallucinations (perceptions of things that are not real), and paranoia (feelings of persecution). The usual trigger for the onset of these symptoms in PD is either the addition of a new anti-PD drug, such as amantadine, a dopamine agonist, selegiline, or an increase in levodopa dose. A head injury or a metabolic imbalance can also be responsible for these types of behavioral changes. If the dramatic change in behavior is actually due to a primary psychotic depression, rather than an adverse medication or an injury, both an antidepressant and an atypical antipsychotic medication are appropriate. At the same time, a reduction in or elimination of one or more of the person with PD's anti-PD drugs might be necessary. Pimavanserin was approved in 2016 for the treatment of hallucinations and delusions in PD, and has the advantage that it does not worsen PD motor symptoms, which is a risk with some antipsychotic drugs.

Deep brain stimulation (DBS) surgery can result in the appearance or exacerbation of personality, anxiety, or mood disorders in some persons with PD. In particular, a history of major depression is a risk factor for a significant post-operative mood disorder, even when surgery results in marked improvement in motor functioning.