Psychotic Symptoms in Parkinson’s Disease

By Michael Rezak, MD PhD

Psychosis is generally defined as a mental condition where there is a significant derangement in the perception of reality. Specific features of psychosis include hallucinations, delusions, disorganized speech (related to disorganized thinking) and bizarre behavior (based on the disorganized thinking). In Parkinson’s disease the most common source of psychotic symptoms is related to treatment with the dopaminergic medications (L-Dopa and the dopamine agonists) used to improve the motor aspects of PD, especially in the setting of any level of dementia. Other risk factors for psychotic symptoms include the concomitant use of anticholinergic drugs, long disease duration, long duration of treatment for PD, sleep disturbances and total amount of medications used for PD treatment.

In PD, the most common psychotic symptoms include visual hallucinations and delusions. These symptoms have been shown to occur in about 25-30% of PD patients. A smaller number of individuals suffer from lesser complaints including the “feeling that someone is there”, illusions (misperception of objects) and distortions of visual space. A visual hallucination is defined as the perception of objects or living things when none is actually present. Some patients retain insight into the fact that these hallucinations are not “real” while others do not. Obviously, the latter situation is more serious. A delusion is a false belief or wrong judgment held with conviction despite incontrovertible evidence to the contrary. In PD these beliefs are often of a paranoid nature and commonly involve spousal infidelity and feelings of persecution.

Not only do the psychotic symptoms impact heavily on the quality of life of the PD patient, but they also contribute to excessive caregiver burden and often lead to nursing home placement. Furthermore, it is generally accepted that the presence of psychotic symptoms provides a less favorable prognosis for long-term survival. Thus, making the physician aware of these symptoms so that treatment can be instituted is very important.

Treatment of psychotic symptoms can result in improvement and in some cases total resolution of symptoms. In certain cases, reduction of PD medications alone can be beneficial, but this approach is often limited by the worsening of motor symptoms. The “atypical” neuroleptic drugs, clozapine (Clozaril) and quetiapine (Seroquel) have been shown to significantly reduce hallucinations and delusion in PD patients at relatively low doses without compromising motor function. This is in contrast to the “typical” neuroleptic drugs (e.g., halol, stelazine, etc) as well as the other “atypical drugs (respiridone and olanzapine) that can worsen parkinsonism in most patients.

Recognition and appropriate management of psychotic symptoms in the PD patient require a detailed evaluation by a neurologist, not only to make proper treatment recommendations, but also to rule out the existence of other factors contributing to the symptoms that require different forms of treatment such as dehydration, other intercurrent illnesses and other various forms of psychiatric illnesses.

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Psychiatric Disturbance or Normal Response?

By Laura Marsh, MD

"Is it normal for me to have feelings of depression or is this a part of my disease?" This is one of the questions I am frequently asked by patients with Parkinson’s disease (PD). This question is important and relevant because 40-50% of patients develop depressive disorders at some point. When identified, depressive disorders can be treated successfully, giving patients improved quality of life and reducing disability. However, since everyone experiences emotional variations, determining whether the emotions are part of a clinical condition that needs medical attention can be especially challenging. Therefore, this distinction should be made by your doctor and may require specific assessment by a psychiatrist. However, I also stress that patients should become informed about mood disorders and how they overlap with other features of PD. As a psychiatrist, I find it much easier to evaluate treatment response and detect or prevent a return of the depressive disorder when my patients are taught to monitor relevant mental and physical symptoms.

Distinctions between depressive disorders and depressed emotions can often be unclear because depression can be part of a normal reaction to difficult circumstances or may be part of a variety of psychiatric conditions that are related to the underlying brain changes in PD. In general, the term depression refers to an emotion characterized by sad and unhappy feelings. Depressed emotions are normal, especially in the setting of loss. In patients with PD, changes in function can be associated with a sense of loss resulting in depressed feelings. However, it is not uncommon for people to use the term “depression” somewhat loosely, when they are really experiencing feelings of anger, disgust, anxiety, apathy, or tiredness. Thus, it is important and helpful to explain to your doctor how you are feeling emotionally so the doctor can then determine why you have these feelings and provide proper treatment.

When determining how to treat depression properly, the doctor will do an assessment to differentiate whether the patient’s depressive symptoms include such components as normal states of grief or demoralization, interpersonal difficulties, adjustment disorders, apathetic syndromes, anxiety disorders, pathological tearfulness (also called emotionalism), fluctuating mood states that correspond to “on-off” effects of Parkinson medications or dementia. Sometimes patients or doctors resist exploration of this differential diagnosis because of fears about the implications of a psychiatric diagnosis, but I think that an unacknowledged psychiatric disturbance is a much more frightening prospect.

One important clue to the presence of a depressive disorder is the inability to effectively respond at an emotional or behavioral level to life’s challenges, including those brought on by PD. Many people think that mood disorders result from a lack of coping skills, but this is not true. With PD (or any chronic illness), successful coping and adaptation are virtually impossible in the face of an untreated mood disorder. Individuals who are ordinarily resilient and resourceful when faced with
adversity will often say, “I keep trying, but I just can’t keep my chin up.” Recognition of this state may be more difficult in individuals who have always “coped well” and continue to attempt to compensate as best as possible despite their untreated mood disorders. Once the depressive disorder is treated, however, the person is better able to face the challenges associated with PD, respond to encouragement, develop ways to compensate satisfactorily, and exploit new opportunities. In fact, such changes are often taken as signs that the mood disorder is responding to treatment.

From the viewpoint of a person with a depressive disorder, one of the most important coping strategies---maintaining a positive attitude, or at least not dwelling on negative thoughts---does not even seem to be an option. However, since ineffective coping and poor adjustment also occur in the absence of mood disorders, it is important to be familiar with the more fundamental features of depressive disorders in PD. The key features of a depressive disorder are a sad mood and/or the inability to enjoy or be interested in activities that would ordinarily be pleasurable (also referred to as anhedonia). In addition, the sad or anhedonic feelings are usually persistent and pervasive. Feeling sadness or a sense of loss over having to stop working because of PD can be an understandable cause for feeling discouragement. However, in the absence of a depressive disorder, the feelings are transient and the person usually continues to pursue and achieve satisfaction from other activities; the sadness does not color virtually all aspects of life. Negative ruminations, especially about oneself, or morbid thoughts about death (especially one’s own death), and excessive and inappropriate feelings of guilt are also very common in depressive disorders. While it may be normal to feel guilt over past mistakes or sadness over losses or resentment because of the impact of PD on daily functioning, these feelings become a preoccupying source of distress in the setting of a depressive disorder. There may also be significant anxiety as a feature of a depressive disorder, although anxiety disorders are fairly common in PD and can occur independent of depressive disturbances.

A variety of intellectual and physical symptoms are frequently present in PD-related depressive disorders. These symptoms also occur in PD without depression, but they tend to be worse when the patient has an untreated depressive disorder. The intellectual symptoms include problems with concentration, attention, and memory, slowed thinking, and difficulties multi-tasking. Physical symptoms include fatigue, low energy, slowed movements, aches and pains, and appetite and sleep disturbances. When there is a depressive disorder, these symptoms will be accompanied by the fundamental mood changes mentioned above and they are usually associated with greater disability. In fact, when patients describe a degree of disability that is far greater than their motor examination suggests, it is important to look for signs of a depressive disorder. Successful treatment of depression improves intellectual deficits, fatigue, and slowness and patients are better able to pursue regular exercise and other compensatory strategies that maximize function, such as modulating the pace of their activities and using memory aides.

The need for specific treatment of a depressed mood is based on the underlying diagnosis. Psychotherapy may help gain perspectives and maintain behaviors that promote well-being. Antidepressant medications are generally indicated when depressive disorders persist and contribute to significant distress and dysfunction. After depressive disorders respond to antidepressant medications, self-management approaches such as exercise, pacing daily activities, avoiding sleep deprivation,
maintaining a positive attitude and engaging in healthy emotional activities become the focus of treatment and relapse prevention, and hopefully will become the focus of future research studies explicitly for symptom management in PD.

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*One Woman's Experience with Cognition*

*by Carey Christensen*

I couldn’t explain it. After a series of significant setbacks at work that were unrelated to Parkinson’s disease, I was unable to respond to the situation with my usual coping skills. Almost two years after being diagnosed with PD, my symptoms of right-side tremor and rigidity remained only mildly annoying. What was really bogging me down was a newly unclear mind which seemed unable to focus and concentrate in ways that I was used to. My self-proclaimed “three-dimensional multi-tasking” abilities had been reduced to one-at-a-time tasks which were not always completed, and details fell through the cracks. Depression overwhelmed and immobilized me. With great effort I made an appointment to see my neurologist – my first visit in over a year. “What’s happening to me,” I asked.

“It’s the PD. Stress worsens it,” the neurologist said. But my physical symptoms had not worsened —yet I felt like a mental and emotional wreck. What I came to realize was that PD can also affect mental and cognitive abilities that rely upon dopamine to work correctly, a fact that is rarely addressed in the literature or in information given to the newly diagnosed. This omission is probably due to a variety of reasons that may include the lack of research done on this aspect of PD; the fact that most PD patients are older and retired, so declining mental abilities appear to be age appropriate; and many doctors simply don’t want to worry patients and their families or cause them anxiety that may result in their imagining cognitive changes.

But this was not my imagination, and I was only 43 years old with a family to care for and a mortgage to pay. I wanted answers. My search resulted in two things: I became connected and involved with a global community of fellow people with PD who validated and normalized my situation because of the similarity of our stories, and I created a website at www.cognition.org as a place to collect and disseminate information about the mental aspects of Parkinson’s disease.

I learned that unpaid bills and other tasks that remained undone were problems not uncommon to others with PD; that PD could interfere with the part of the brain that controls executive functioning and thus reduce my ability to concentrate and multi-task; that the reason I couldn’t turn off the computer at 3:00 a.m. was probably because of a possible PD connection to obsessive-compulsive behaviors and that depression kept me from taking action.
I learned that for young people with PD, the mental aspects of PD were often a larger factor than the physical changes in creating challenges to their relationships and in contributing to the loss of jobs or early retirement.

But most importantly, I also learned that I was not going crazy, and that I had not lost my ability to problem solve and to think. And even though it seemed so difficult to overcome these obstacles, I learned that with education, determination and support, I could do it.

The discovery that “cognition” was “normal” for many people with PD gave me the strength to take steps towards managing my life and alleviating stress. It is not easy, and I could not and cannot do it alone. Counseling sessions with a neuropsychologist, as well as conversations with PD compatriots and supportive friends and family members give me the strength to maintain and improvise, and the motivation to follow through. Antidepressant medication has been very helpful in creating an internal environment in me that helps me to focus and to act in my own behalf.

People with young onset PD present a new public health challenge: keeping healthy, active, and productive in order to raise families, go to work, and survive for many years as medical science continues to make our bodies stronger so that we live longer. But our brains have to keep up with our bodies, and understanding the challenges that “cognition” may present is helpful to us in leading full and healthy lives. Developing effective strategies of coping, along with more funding for research in this area, will help tackle “cognition.”.

In order for people with Parkinson’s to cope and even to thrive, it would be very helpful if this information could be presented up front and early in the diagnosis so that they can be aware that PD may also affect some areas of mental functioning. If presented with sensitivity, this information can actually be helpful and hopeful, and can reduce the anxiety that may result if these changes occur without the knowledge that they are “normal” and can be helped. Access to information is essential to good health and a well balanced life. Information enables; education gives hope; advocacy increases strength; and knowledge is power. You CAN take control of your life!

**Depression & Memory**

Memory is more than the recognition of times past. Memory is an indispensable tool for interaction with our environment. All of the activities important for our daily living (dressing, grooming, and eating, for example) rely on learned actions, thus involve memory. Beyond these simple but crucial activities, memory plays an even greater role. Shopping, traveling, paying bills, using the telephone, and taking daily medications are very dependent on our ability to remember. This is taken for granted by most of us until there is a problem.

Occasionally, misplacing an object or forgetting a phone number will provoke an “I’m getting Alzheimer’s,” response. However, that rarely proves to be a problem. Conversely, difficulty performing tasks that require several steps, trouble forming a
reasonable plan for day-to-day problems, or struggling to find the way around familiar surroundings should NEVER be shrugged off as merely “getting older” or “just Parkinson’s.” These symptoms are part of a more global disorder of thinking that may impair judgment, reasoning, and/or speech. These symptoms should ALWAYS be reported to your doctor. When in doubt, any concerns should be brought to the attention of a physician.

Medications of all types may have adverse effects on thinking and memory, including prescription, non-prescription and herbal substances. An accurate medication list may be the first item a physician asks for after listening to a complete history of the problem. There are over 70 separate illnesses besides Parkinson’s that can contribute to memory and thinking difficulties. These illnesses range from easily curable vitamin deficiencies to incurable but treatable conditions such as Alzheimer’s disease. Thus the evaluation can be extensive, yet worth it.

One of the common illnesses often associated with memory complaints is depression. Older individuals and people with chronic diseases such as Parkinson’s may not manifest depression in a way that is always easy to recognize. Our knowledge of depression as an illness has improved substantially over the last several years. The chemicals, or neurotransmitters, in our brains that control our motivation and mood are deficient in depression. Therefore depression is a true illness and not just weakness of character or the lack of will. The subtle symptoms of depression often include a frustrating problem with memory, an inability to enjoy usual pleasures, a lack of motivation, or a quick temper. The more obvious feelings of overwhelming sadness, worthlessness, and hopelessness can be manifest as well.

I often screen an individual with Parkinson’s disease by asking if he/she feels sad or depressed and get the response, “Wouldn’t you be!” This is an important point. We all go through stresses in life—changes in our job, moving to a new city, divorce, illnesses, a death of a loved one, etc. These stresses are also associated with the same decrease in the neurotransmitters responsible for depression. Then what happens? We start to utilize our support systems. We talk to friends and family, we exercise, or we might go shopping—the natural anti-depressants we have cultivated over our lifetimes. Neurotransmitters then normalize. There is a point, however, and we are not sure why this happens in some people, where our natural anti-depressants cannot reverse the process and depression results.

Depression is more common in people living with Parkinson’ disease. Even though it may show up with subtle symptoms, depression can be differentiated from other causes of memory loss. Depression in Parkinson’s can be reversed.

In summary, problems with memory should never be attributed to “getting older” or “just Parkinson’s.” A problem with memory or thinking is a symptom like a tremor or a pain in a joint and should be evaluated.