Depression in Neurodegeneration

By Dylan Wint, MD



Dr. Dylan Wint

What is depression?

Depression (or major depressive disorder) is a syndrome – a group of related symptoms – that results from a change in the brain's function. We are not sure what causes depression. It is sometimes related to life circumstances, for example grief or stress. It also is associated with a number of physical conditions, including diabetes, heart disease and nutritional deficiencies. Depression is particularly common in diseases that affect the brain, such as stroke, Parkinson's disease and Alzheimer's disease. In people with brain diseases, biological changes in the structure, function and chemistry of the brain probably increase the risk of depression. But depression can strike people without any known risk factors – 10 to 20 percent of people will suffer a depressive episode at some point in their lives.

What does depression look like?

People with depression have a persistently sad mood or decreased enjoyment of life that lasts for at least two weeks. Because of abnormalities in the brain's function, other symptoms can occur. These include altered sleep patterns, fatigue or poor energy, decreased interest in pleasurable activities, feeling heavy or slowed down, and fluctuations in appetite. Some depressed people feel changes in the way they think, such as impaired concentration, slow decision-making, excessive thoughts of guilt or worthlessness and thoughts about death.

Depression often looks somewhat different in people with neurodegenerative disorders because of their problems with memory, awareness and communication. They might not complain about being sad, but their facial expressions and the things they say betray a negative or hopeless attitude. Irritability and social withdrawal can take the place of sadness. Patients often "put on a good face" during office visits, leaving healthcare providers to rely on caregivers to report changes in mood and behavior.

Depression in caregivers also frequently goes undetected and untreated. Caregivers try to maintain a positive attitude even when things are not going well. They can become so busy with caregiving that they miss signs of their own illness. Sometimes caregivers worry about being weak, complaining or putting blame on their loved one, so they don't speak up about being depressed. Some symptoms of depression are mistaken for "part of



the job" of caregiving, since every caregiver has experienced fatigue, poor sleep or feelings of unworthiness. However, when such feelings and thoughts are pervasive, persistent and interfere with one's ability to get through the day, depression might be the cause.

What's the big deal?

Obviously, being depressed is a miserable way to feel. But depression has many other serious complications.

Direct consequences of depression include malnutrition, poor performance, reduced productivity and even death from suicide or poor self-care. Scientists are studying whether depression can actually make the course of neurodegenerative diseases worse. For example, some studies have suggested that having depression increases the risk of getting dementia, and that depression makes dementia progress more rapidly.

Depression increases the suffering caused by other illnesses, including heart disease, stroke, pain syndromes and diabetes.

Depression can deeply affect relationships with spouses, children and friends.

What can we do about it?

Episodes of depression are common, especially in neurodegenerative disease, and they can be hard to detect. But depression does not have to be permanent – most people respond to approved treatments for depression. Antidepressant medication is the most common treatment. These medicines are widely available and are safe and effective when used appropriately. Although they are a good choice for many people, medications are by no means the only option. Non-medical methods of improving mood include habitual exercise, proper sleep habits, stress reduction techniques and regular participation in leisure activities. Studies have demonstrated that cases of mild and moderate depression respond as well to talk therapy as they do to medication.

About the Author:

Dylan Wint, MD is board certified both in psychiatry and neurology, and has focused his career on understanding and treating neural-based behavioral disorders. He participates in clinical and research programs in this area at the Cleveland Clinic Lou Ruvo Center for Brain Health, and leads the center's professional education programs.

Dr. Wint received his medical degree at the University of Miami School and completed his training at the University of Florida and the National Institutes of Health. He holds a Bachelor of Science from Stanford University. Dr. Wint most recently served as Assistant Professor and Director, Program in Neurologic Psychiatry at Emory University Medical School.

