Depression and Multiple Sclerosis

Addressing depression may improve care for patients with multiple sclerosis.

By Thomas P. Leist, MD, PhD

Patients with multiple sclerosis (MS), a chronic, syndromic autoimmune condition of the central nervous system (CNS), are at a higher risk for certain mental health issues, including depression. MS is more often diagnosed in the second and third decade of life and is associated with an increased risk of disability. Approximately 3 out of 4 newly diagnosed patients are women. Treatment includes disease-modifying therapy and, because of the underlying immune-mediated injury to the CNS, symptomatic treatments including conservative, restorative, and pharmacologic therapy. Symptoms of mental health conditions are often among the symptoms requiring treatment. In fact, presence of psychiatric symptoms in MS has been recognized since Charcot’s initial description of “disseminated sclerosis” in his patient Mademoiselle V who Charcot described as having a fit of “lypemania” or depression in combination with hallucinations and paranoia.¹

The comorbid occurrence of psychiatric conditions in patients with MS may be due to several factors, including response to chronic illness, a relationship between immune function and depression and anxiety, disease process-related injury to the CNS, and possibly side effects of certain treatments. Screening for symptoms and the presence of comorbid psychiatric issues and initiation of or referral for appropriate therapeutic interventions is an important part of patient care. Psychiatric comorbidity can decrease adherence to disease-modifying therapy, increase fatigue, and decrease overall quality of life.

Incidence and Prevalence of Mental Health Comorbidities in Patients With Multiple Sclerosis

Psychiatric comorbidity, including depression, anxiety disorders, bipolar disease, and drug and alcohol abuse, has long been recognized as a concern for patients with MS, and prevalence of these comorbidities increases over the course of MS. Major depressive disorder and anxiety each affect more than 20% of patients with MS,² and depression, anxiety, and bipolar disorder occur more often in these patients than in the general population. The rate of suicide in patients with MS is approximately 2 times higher than in the general population. Factors associated with suicidal thinking include age over 65 and more marked disabilities with bladder, bowel, swallowing, and speech involvement. Additionally, younger men are at a significantly higher risk in the first few years after diagnosis.³ Although there is a higher incidence of depression in patients with MS, and clinicians should maintain a high index of suspicion for this comorbidity, it is also true that depressive symptoms are reported by a far greater number of patients with MS who do not fulfill criteria for major depression versus those who do. Herein also lies one of the difficulties assessing data on the incidence and prevalence of depression in those with MS as assessment tools and diagnostic criteria for depression vary among studies.⁴

Access to Mental Health Care for Patients With Multiple Sclerosis

There are practical challenges to diagnosing and treating mental illness in patients with MS. Faced with MS, individuals may tend to focus primarily on physical health and put their emotional health second. Given the societal stigma that still exists regarding mental illness, patients with MS may also view having mental health needs as a form of weakness or even as something shameful. When patients are open to addressing mental health care in their disease management, this can still be difficult, because of the challenge of access to mental health care professionals who have expertise treating and/or counseling individuals with MS. Limited access is also driven in part by limited participation of mental health care providers in managed care plans, particularly Medicaid plans. The often significant copays patients incur also limits access to mental health services.⁵ Federal rules, health care-quality initiatives, and prompts from electronic health record (EHR) software
may all increase depression screening for all patients in the future, including those with MS. This may increase identified needs and exacerbate access disparity already in existence. Primary care physicians and neurologists will likely have to fill part of the void as many do now. Additional resources such as clinics associated with training programs that may offer patients access on a sliding-scale fee basis can also be helpful. To help make patients aware of available resources, it is suggested that contact information for the National Crisis Hotline (1-800-273-TALK [8255] or text “ANSWER” to 839863) be included in pertinent patient materials.

**Diagnosing Depression in Patients With Multiple Sclerosis**

Major depressive disorder is characterized by a combination of symptoms including a sad mood most of the day/most days, a loss of pleasure or interest in one’s usual activities, sleeping problems, fatigue, psychomotor retardation or agitation, reduced appetite with weight loss or the converse, a negative self-image, feelings of guilt and self-blame, reduced concentration, and suicidal thinking. As noted, there is an overlap between the symptoms of MS and depression. Fatigue, lack of concentration, altered sleep patterns, and memory issues are symptoms shared between depression and MS. It is important to attribute these symptoms to the appropriate diagnosis or diagnoses depending on the medical history of the individual patient and initiate interventions accordingly. Screening tools for depression are readily available and range from simple to complex. One of the simplest is a 2-question screening tool that includes asking:

1. During the past 2 weeks, have you often felt down, depressed or hopeless?
2. During the past 2 weeks, have you had little interest or pleasure in doing things?

If these questions are answered affirmatively, using a more comprehensive screening tool, taking additional history, and appropriate laboratory testing, including thyroid function testing may be indicated. Depending on what the additional workup shows regarding potential causes of depressive symptoms, appropriate referrals or treatment interventions should be initiated.

Significant others and caregivers may also raise the concern for depression, and as for any other symptom or concern for patients with MS, it deserves careful assessment and treatment. The clinical context in which a patient responds to questions or screening tools is also important. Individuals with MS experience transitions and losses that can be traumatic at the time of diagnosis, during changes in disease activity, disease progression, functional disabilities, and other situational changes occur. During such periods of change, a person may mourn the loss of what they experienced prior to the change. This process should be time-limited and self-resolving but can also develop into depression. It is therefore important to distinguish an individual patient’s recent depressive symptoms from clinical depression. Clinicians should also be vigilant for symptoms of depression that reflect injury from the MS disease process to brain structures involved in emotional expression (eg, pseudobulbar affect). Side effects of medications including corticosteroids and possibly interferons can potentially trigger or worsen depression in susceptible individuals.

Notwithstanding the foregoing considerations, the prevalence of depression is high in patients with MS even when compared to other chronic illnesses including other autoimmune conditions, such as rheumatoid arthritis, or inflammatory bowel disease. Approximately 2 out of 3 individuals with MS will experience depression in its various forms, and symptoms can occur at any point in the course of the disease. Explanations for the increased incidence of depression in individuals with MS may include the location of MS lesions and the degree and nature of the MS-induced immune activity in the CNS. The relationship between depression and MS disease impact may also be explained and/or influenced by an individual’s changing self-image over the course of MS and subsequent adjustment of his or her coping mechanisms.

**Treating Depression in Patients With Multiple Sclerosis**

Patients should be assessed for depressive symptoms, clinical depression, and suicidal ideation and intent at regular intervals and whenever clinical concern arises. A treatment plan for depression includes pharmacotherapy, psychotherapy, and possibly cognitive-behavioral therapy. Treatment guidelines have been proposed such as those of the Canadian Network for Mood and Anxiety Disorders. Treatment of depression should include mental health practitioners, whenever deemed necessary and possible. Initial pharmacotherapy for depression is often instituted by a neurologist or primary care provider. There are no head-to-head studies establishing the superiority of one agent over another. However, comorbid conditions may be given consideration when choosing an antidepressant for a person with MS. Anxiety, neuropathic pain, fatigue, and bladder dysfunction are frequent comorbid conditions in MS. Antidepressants with sedating or anticholinergic side effects, such as tricyclic antidepressants, should be avoided, particularly in individuals with uncontrolled fatigue, cognitive issues, and/or dysautonomic symptoms. SSRIs and SNRIs form the mainstay of therapy. Selection of a given agent may be affected by comorbid conditions such as
neuropathic pain. An agent such as duloxetine may treat both depression and neuropathic pain.

Psychologic treatments for depressive disorders include cognitive-behavioral therapy, interpersonal therapy, and behavioral activation and should be provided by trained mental health practitioners. Computer-based and telephone-delivered psychotherapy are normally considered secondary treatment approaches. Patient preference and provider and system capacity may affect local availability.\(^9\) Validation of the individual treatment approaches in MS remains largely subject to future studies. Neurologists or primary care providers may initiate behavioral interventions including a regulated daily schedule with a fixed bedtime, a regular exercise regimen, development of social (traditional sense of the term) networks, stress reduction, and reduction and elimination of potentially addictive substances such as alcohol or cannabis products.

**Summary**

Depression in MS adds significantly to the overall burden of the disease, and when present and unaddressed, impacts a patient’s quality of life, a number of their MS-related symptoms, and, through impaired medication adherence, disease outcome. MS-related depression is best addressed by a multidisciplinary care team familiar with the wide clinical presentations of the condition. It is common for the primary care physician and/or neurologist to take on a crucial role in identifying depression in patients with MS and initiating treatment.


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