

Multiple Sclerosis's Neuropsychiatric Manifestations and Mental Health Symptoms Linked to it

Introduction

Multiple sclerosis is the most common chronic neurologic condition affecting young adults in the United States, with a prevalence of approximately 1 in 1000. Previously thought to be an inflammatory, demyelinating disease primarily affecting central nervous system (CNS) white matter, more recent imaging studies have shown that significant damage to cortical gray matter also occurs. Multiple sclerosis affects twice as many women as men, and the prevalence rises as geographical distance from the equator increases. Visual disturbances (diplopia, blurred vision), weakness, gait disturbance, vertigo, fatigue, urinary retention and incontinence, and difficulties with speech and swallowing are all common clinical signs and symptoms of MS. Neuropsychiatric symptoms are also common and may be the first sign of MS. Because many of the typical signs and symptoms are nonspecific and pseudoneurologic, patients are frequently mistaken for having a primarily mental illness, and a diagnosis may be delayed [1].

Supporting laboratory data include the presence of oligoclonal IgG bands on cerebrospinal fluid analysis, abnormalities of visual-evoked potentials, and characteristic MRI lesions corresponding to "plaques" of demyelination.³ There are four MS subtypes that correspond to the course of illness. The clinical diagnosis of multiple sclerosis is based on the presence of neurologic symptoms that are disseminated in space and time: relapsing-remitting (66%), secondary-progressive (16%), primary-progressive (15%), and benign MS.⁸ In relapsing-remitting MS, patients fully recover between exacerbations, whereas primary-progressive MS patients experience accumulating symptoms and disability from the beginning of the disease without going into remission. Most sufferers from the secondary-progressive subtype, in which patients experience exacerbations and apparent recovery early in the course of the disease, but symptoms eventually progress and remission is not achieved [2]. A small percentage of patients with benign MS only experience one MS episode and never experience any more exacerbations [3].

Which mental health symptoms are linked to multiple sclerosis?

Mental side effects in MS are profoundly predominant and much of the time neglected in clinical settings. Out of 1 investigation of backsliding transmitting patients with MS going away, 95% detailed critical mental side effects, most often dysphoria (79%), unsettling (40%), tension (40%), and crabbiness (35%).¹⁵

Significant burdensome problem (MDD) is especially normal, with a lifetime predominance rate of roughly 50%, when contrasted with a rate of 10% to 15% in everyone. In one study, depression surpassed physical disability and cognitive function as a significant determinant of quality of life.¹³ Several factors related to MS symptomatology, disease course, and treatment may contribute to the exceedingly high rates of depression and its complications seen in MS patients. Suicide rates are also significantly higher in those with MS. However, studies generally support the strikingly high prevalence of depression in MS patients, finding high rates of MS-associated depressive disorders

even when somatic complaints are not included in the diagnostic

inconsistent. Glatiramer acetate has generally not been associated with

12. Piehl F, Kockum I, Khademi M, Blennow K, Lycke J, et al. (2018) Plasma neurofilament light chain levels in patients with MS switching from injectable therapies to fingolimod. *Mult Scler* Houndmills Basingstoke Engl. 24:1046-1054.
13. Asad H, Carpenter D O (2018) Effects of climate change on the spread of zika virus: a public health threat. *Reviews on environmental health* 33(1):31-42