Available online at www.sciencedirect.com

ScienceDirect

Comprehensive Psychiatry 63 (2015) 10–14

COMPREHENSIVE PSYCHIATRY

www.elsevier.com/locate/comppsych

Psychiatric disorders in patients with multiple sclerosis

Ana Claudia de Cerqueira[a,*], Patricia Semionato de Andrade[b], Jose Maurício Godoy Barreiros[b], Antonio Lúcio Teixeira[c], Antonio Egídio Nardi[a]

[a]Federal University of Rio de Janeiro, Institute of Psychiatry
[b]University of State of Rio de Janeiro, Department of Neurology
[c]Federal University of Minas Gerais, Interdisciplinary Laboratory of Medical Investigation

Abstract

The aim of this study was to evaluate the frequency of psychiatric disorders, particularly mood disorders and anxiety in an outpatient sample of patients with multiple sclerosis in Brazil, and correlate the result with sociodemographic and clinical data. Methods: Cross-sectional study, patients evaluated consecutively, for the clinical, demographic, prevalence of psychiatric disorders was used structured interview (MINI), severity of symptoms of depression and anxiety was used Beck inventory. Results: The prevalence of major lifelong depression in this population was 36.6%, and the risk of suicide was high. There was no detectable correlation between depression, degree of disability, or disease duration. Conclusion: The prevalence of mood disorders is high in MS. Depression is an important factor related to the risk of suicide and should be investigated systematically.

The presence of psychiatric symptoms in multiple sclerosis (MS) is known from the first clinical description of sclérose en plaques by Charcot at the Hospital Pitié-Salpêtrière in the nineteenth century. These symptoms include pathological crying and laughing, euphoria, hallucinations and depression [1]. The first studies on the prevalence of depression began in 1927 and were conducted by Cottrell and Wilson; these authors identified symptoms of depression in 10% of MS patients evaluated consecutively [2]. Studies have shown that MS patients have an increased risk of presenting with psychiatric disorders, particularly mood disorders. These disorders, if not identified and treated, can worsen patient functioning and quality of life, reduce treatment adherence and increase the risk of suicide. The prevalence of major depression throughout life is between 36% and 54%; bipolar disorder, 13%; and anxiety disorders, 35.7%. The risk of suicide is twice baseline rates in this population [3,4].

The objective of this study was to evaluate the frequency of psychiatric disorders, particularly mood and anxiety disorders, in an outpatient sample of patients with multiple sclerosis in Brazil and to correlate with sociodemographic and clinical data.

1. Material and methods

Between January 2012 and December 2013, a cross-sectional study with a convenience sample of consecutive multiple sclerosis patients was performed at a public university-based outpatient service for Neuroimmunology in Rio de Janeiro, Brazil. In this study, all patients with the diagnosis of multiple sclerosis according to the criteria of McDonald et al. were invited to participate. Exclusion criteria were patients with exacerbation of the disease in the last three months, age under 18 and over 65, higher degree of disability EDSS (Expanded Status Scale Kurtze Disability) > 7.5, schooling less than four years, and patients with other neurological diseases that could potentially interfere with the assessment, such as epilepsy, history of traumatic brain injury (TBI) or stroke.

A complete medical history focusing on the disease, the use of medications, and socio-demographic data was obtained concurrently. A clinical evaluation was performed by neurologists to quantify the degree of incapacity by EDSS

* Corresponding author at: Federal University of Rio de Janeiro, Institute of Psychiatry, 24240-220 Rio de Janeiro, Rio de Janeiro, Brazil.
E-mail address: anacerqueira@globo.com (A.C. de Cerqueira).

http://dx.doi.org/10.1016/j.comppsych.2015.08.001
0010-440X/

(Expanded Status Scale Kurtze Disability). The psychiatric evaluation was performed concurrently. For this purpose, we used version 5.0 of the Mini International Neuropsychiatric Interview, a short structured interview designed to explore each of the necessary criteria for the main diagnoses of DSM-IV Axis (American Psychiatric Association, 1994), which was the principal diagnostic instrument. This instrument also contains one specific section that allows for suicide risk assessment [5].

The severity of depressive symptoms was assessed using the Beck Depression Inventory (BDI), and the severity of symptoms of anxiety was assessed through the Beck Inventory for Anxiety (BAI). Patients signed a written informed consent to participate in the study, which was approved by our local Research Ethics Committee.

Pearson χ^2 was performed for categorical univariate analysis, and Student t-tests for independent samples were used for the univariate analysis of continuous variables. SPSS version 18 (SPSS Inc., Chicago, IL, USA) was used to conduct all analyses.

2. Results

A total of 70 patients with MS were invited to participate in the study but 10 were excluded according to the exclusion criteria: 1 due to Parkinson's disease, 1 due to epilepsy, 1 due to brain injury, 1 due to dementia, 2 due to a degree of disability greater than 7.5 obtained in EDSS, 2 due to present age younger than 18 years, and 2 due to lower education level than four years.

In total, 60 patients with MS participated in the study. The sample included 46 (76.7%) female and 14 (23.3%) male patients. Their ages ranged from 19 to 65 years, with a mean of 43 (SD = 11.8). Seventy-five percent of the sample had a degree of education in excess of 11 years. The relapsing–remitting form was found in 49 (81.7%) MS patients. Disease duration ranged from 1 to 28 years, with a mean of 9.6 (SD = 6.8). The degree of disability ranged from 0 to 7.5, with a mean of 2.9 (SD = 2.2). Regarding treatment for MS, 47 (78.3%) were using interferon beta 1A.

Regarding the frequency of mood disorders, 36.6% had depression throughout life, while 13.3% had bipolar disorder (BD). In relation to the frequency of anxiety disorders, generalized anxiety disorder (GAD) was the most frequent, detected in 16.7%, followed by panic disorder (PD) diagnosed in 3.3%. Other anxiety disorders such as obsessive–compulsive disorder (OCD), social phobia (SP) disorder and post-traumatic stress disorder (PTSD) were not detected in this population. For other mental disorders, 1 patient had bulimia nervosa, 1 exhibited dependency and abuse of marijuana and cocaine, and 1 presented psychotic symptoms (Table 1). It is important to mention that 11 patients used some type of antidepressant for several indications; 9 (15%) were using the following antidepressants in therapeutic doses for the treatment of major depression: amitriptyline 75 mg (n = 1), venlafaxine 75 mg (n = 1), fluoxetine 30 mg (n = 1), fluoxetine 20 mg (n = 6). In total, 6 (10%) were diagnosed to be in a current depressive episode, and 3 (5%) had passed from depression, so they had recently recovered. The use of benzodiazepines was reported by 8 patients (13.3%). In total, 31.6% were using some psychoactive drug.

Table 1
Psychiatric disorders in patients with multiple sclerosis.

Psychiatric disorder	N	%
Depression		
Absent	38	63.3
Current depression	11	18.3
Past depressive episode	11	18.3
Bipolar Disorder		
Without bipolar disorder	52	86.7
Hypomania	6	10
Mania	2	3.3
Anxiety disorders		
Absent	48	80
GAD	10	16.7
PD	2	3.3
OCD	–	–
PTSD	–	–
Social phobia	–	–
Alcohol abuse/dependence	–	–
Substance abuse/addiction	1	1.6
Psychotic episode	1	1.6
Eating disorders		
Anorexia nervosa	–	–
Bulimia nervosa	1	1.6
Antisocial personality disorder	–	–

GAD, generalized anxiety disorder; PD, panic disorder; OCD, obsessive–compulsive disorder; PTSD, post-traumatic stress disorder.

In this study, we compared the demographic and clinical characteristics between the groups who were and were not experiencing a current depressive episode (Table 2). The results indicate no significant differences in relation to gender, age or disease duration. The results showed that the severity of symptoms of MS did not seem to be related to major depression.

The risk of suicide was investigated through a MINI-specific section. Of the 60 patients, suicide risk was detected in 16.6%. Of these 8.8% had attempted suicide in the past,

Table 2
Prevalence of depressive and anxiety symptoms in patients with MS.

	N	%
Depressive Symptoms (BDI)		
Absent (0–10)	45	75
Mild (11–18)	11	18.3
Moderate (19–29)	2	3.3
Severe (30–63)	2	3.3
Anxiety Symtoms (BAI)		
Absent (0–7)	39	65
Mild (8–15)	8	13.3
Moderate (16–25)	12	20
Severe (26–63)	1	1.7