Characteristics of Depression Disorders in Multiple Sclerosis
Elias A. Khawam, MD, Leopoldo Pozuelo, MD, FACP, FAPM, Adele C. Viguera, MD, MPH
Psychiatry and Psychology Department, Cleveland Clinic

Introduction
Patient with Multiple Sclerosis (MS) appear to have higher prevalence of a number of psychiatric disorders compared to general population [1]. Identification of comorbid conditions such as depression and anxiety are critical since they have been associated with decreased adherence to treatment [2], functional status [3] and quality of life [4].

The objectives of this study was to examine the prevalence and severity of psychiatric comorbidities and treatment interventions among a cohort of consecutively referred patients to a specialized MS psychiatric clinic embedded within the Neurological Institute's Meilen Center for Multiple Sclerosis at the Cleveland Clinic.

Methods
• A retrospective chart review of 94 patient records was conducted.
• All patients underwent comprehensive psychiatric evaluation performed by board certified psychiatrist (EX). Psychiatric evaluation included diagnostic assessment based on DSM-IV criteria.
• Patients completed standardized self-rated screening questionnaires including:
  - Personal Health Questionnaire (PHQ-9)
  - Generalized Anxiety Disorder (GAD-7)
  - European Quality of Life (EQ-5)
• Clinician rated severity of illness was administered using the Global Clinical Impression Severity scale (CGI).
• Statistical analysis was completed using Excel statistical tool to perform correlation between health status measures.

Results

Demographics
- Age: 44.05 ± 11.13
- Gender: Male 26.60% (25/94), Female 73.40% (69/94)
- Race: Caucasian 79.79% (75/94), African American 15.96% (15/94), Other 4.25% (4/94)
- Marital Status: Married 54.26% (51/94), Single 28.72% (27/94), Other 17.02% (16/94)

Prevalence of Psychiatric Disorders
- Mood Disorders: 26.13%
- Anxiety Disorders: 21.42%
- Substance Abuse: 12.97%
- Cognitive Disorders: 7.80%
- Psychotic Disorders: 3.23%

Prevalence of Mood Disorders
- Major Depression: 13.52%
- Mood Disorder NOS: 7.29%
- Mixed Disorder: 7.29%
- Substance Induced Depression: 7.42%

Prevalence of Anxiety Disorders
- Generalized Anxiety Disorder: 15.96%
- Anxiety Disorder NOS: 13.52%
- PTSD: 7.80%
- Panic Disorder: 7.29%
- Social Anxiety Disorder: 7.42%
- OCD: 4.25%

Comorbid Psychiatric Disorders in Patients with MDD
- Anxiety Disorders: 28.18%
- Generalized Anxiety Disorder: 15.96%
- Substance Abuse: 12.97%
- Cognitive Disorders: 7.80%
- Psychotic Disorders: 3.23%

Treatment Recommendations
- Following Consultation
  - Change Medication: 51.43%
  - Augmentation: 25.64%
  - Dose Adjustment: 17.09%
  - No Change: 13.68%

Most Commonly Prescribed Psychotropics following Consultation:
- SSRIs: 46.81%
- SNRIs: 20.21%
- Benzodiazepines: 25.53%
- Antipsychotics: 15.96%
- Bupropion: 12.97%
- Mirtazapine: 4.26%

Conclusions:
• Our data suggest a very high prevalence of mood disorders (>90%) and other Axis I disorders (including anxiety disorders-substance abuse-cognitive disorders-psycho disorders) among patients with MS referred to a psychiatric consultation clinic.
• Among patients diagnosed with major depression, 40.4% presented with a comorbid anxiety disorder.
• The morbidity associated with major depression and comorbid anxiety was significantly correlated and elevated with means scores in the moderate-to-severe range.
• Following consultation, a change to a different medication was recommended in nearly half the sample of patients (51.4%) while an augmentation strategy was implemented in 25% of the cases. The most commonly prescribed antidepressant class of medications were the selective serotonin reuptake inhibitors (SSRIs) and serotonin norepinephrine reuptake inhibitors (SNRIs) (67%, 63/94). Benzodiazepines and atypical antipsychotics were frequently prescribed in 25% and 16% of cases respectively.
• Assessment of major depression among patients with MS is complex and requires the identification and treatment of comorbid psychiatric conditions. An embedded psychiatric consultation service within an MS clinic is likely to improve patient outcomes and merits further study.

References: