Psychiatric Symptoms in Pediatric Multiple Sclerosis: A Case Series

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Objective

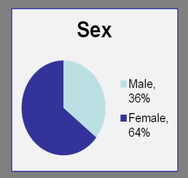
To evaluate the prevalence of mood-related issues in pediatric multiple sclerosis (MS) and clinically isolated syndrome (CIS).

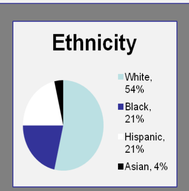
Background

The prevalence of mood-related disorders has been estimated to occur in over 50% of adults with multiple sclerosis (MS). The most common psychiatric disorders characterized in MS include depression and anxiety but an increased incidence of bipolar disorder and pseudobulbar affect has been described in adults as well; however, there is little literature describing psychiatric disorders and mood-related symptoms in pediatric MS.

Design/Methods

Behavior and mood-related symptoms were evaluated in 28 pediatric patients, ages 7 to 18 years (mean=15), with a diagnosis of MS or CIS (who went on to be diagnosed with MS) utilizing the BASC-2, Parent Form. All patients who were seen at Children's Medical Center Pediatric Demyelinating Disease Clinic in Dallas, Texas between 2009 and 2013 were evaluated for clinical purposes. We also performed a retrospective chart review to assess rates of referral to psychology/psychiatric services along with reported suicidality. Furthermore, we completed a review of a patient exhibiting profound psychiatric symptoms in the context of MS.





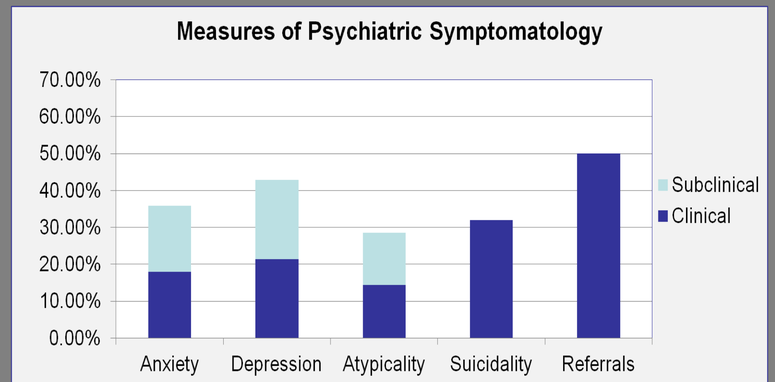
Disease Duration at Testing (years)	Age at Symptom Onset (years)
Mean: 1.6	Mean: 13.5
Range: 0-5	Range: 6-17

Results

Of the 28 subjects tested, approximately 36% exhibited elevated symptoms of anxiety while approximately 43% exhibited elevated symptoms of depression. Also, 29% of subjects showed active suicidal ideations at some point during their clinical course. A total of 50% were referred to mental health professionals with 23% referred specifically for inpatient psychiatric evaluation. Overall, 64% of subjects were found to have abnormal symptomatology in at least one area (anxiety, depression, or atypicality) as reported on the BASC-2, Parent Form.

Case Presentation

Zoe is a 12 year-old, African-American girl diagnosed with RRMS in 2010 after presenting with ataxia and vertigo. MRI and CSF testing were supportive of this diagnosis with MRI revealing a large burden of disease . The patient declined to start disease modifying therapy (DMT) at this time. Upon initial assessment in clinic, she was noted to have anxiety and mild depressive symptoms as reported on the BASC-2, Parent Form. She began counseling and was noted to have increased mood lability. The following year MRI revealed worsening disease burden with multiple new enhancing lesions and the patient agreed to begin DMT. She was started on interferon beta 1-b, but was initially non-compliant taking six months to reach full dose. A year later, Zoe's mother reported worsening depression along with suicidal ideations, and she was taken to the ER for evaluation. Of note, she did not complain of any new neurologic symptoms suggestive of an exacerbation, but a surveillance MRI of the brain performed shortly after the hospitalization again revealed extensive disease burden with numerous new and enhancing lesions. Zoe resumed counseling and was started on an anti-depressant for management of her mood-related symptoms. She continues to follow with our clinic.



Conclusions/Future Directions

- As previously reported in adults, children with MS have a high rate of mood-related symptoms.
- The high rate of psychiatric symptoms in pediatric MS illustrates the need for routine psychological screening.
- The correlation between psychiatric symptoms and MS disease activity should be further investigated in pediatric populations.

References

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2. Weisbrot DM, Ettinger AB, Gadow KD, Belman AL, MacAllister WS, Milazzo M, Reed ML, Serrano D, Krupp LB. Psychiatric comorbidity in pediatric patients with demyelinating disorders. Journal of Child Neurology, 2010; 25(2).

Disclosures

Dr. Greenberg has received consulting fees from Biogen Idec, Acorda Therapeutics, and DioGenix, Inc. He has received grant funding from Amplimmune, Accelerated Cure Project, Guthy-Jackson Foundation, Biogen Idec and the NIH. He holds equity in DioGenix.

Dr. Graves has received honoraria from Teva Pharmaceuticals, Bayer, EMD Serono, and Pfizer.

Ms. Hardeman has received honoraria from Pfizer and Accorda.