(S81) MULTIPLE SCLEROSIS RELAPSES IN THE EMERGENCY DEPARTMENT (DATA FROM RESUMS–RESOURCE UTILIZATION IN MS)
S. Krieger,1 S. Oynhausen,2 C. Hannigan,1 Y. Bencosme,1 M. Alcauskas,1 M. Müller,2 F. Lublin1

1Corinne Goldsmith Dickinson Center for MS, Mount Sinai School of Medicine, New York, NY; 2Department of Neurology, University Hospital of Bonn, Bonn, Germany

Background: Multiple sclerosis (MS) research has focused on relapse prevention, but the urgent care needs of MS patients experiencing a relapse have not been comprehensively evaluated. Objectives: To evaluate the emergency medical needs of MS patients experiencing an MS relapse and the resources used in their care. Methods: All MS patient visits to the Mount Sinai Emergency Department (ED) between 2005 and 2007 were identified, and the charts systematically reviewed. Results: A total of 569 ED visits were made by 224 MS patients. Of the patients, 73.7% were female; the mean age was 47.7 years; and 54% needed an assistive device for mobility (Expanded Disability Status Scale [EDSS] score ≥6). Patients with relapsing-remitting MS (RRMS) comprised 42.4%, and only 50.5% of the RRMS patients were identified as being on a disease-modifying agent (DMA). The majority of ED visits were for non-neurologic complaints (424 ED visits, 74.5%). Of the 145 neurologic chief complaints (25.5%), the most common were weakness (46.2%), altered mental status (14.5%), numbness and vision loss (each 9.0%), and diplopia and seizure (each 3.4%). MS patients with seizures and altered mental status presented to the ED after a mean duration of symptoms of 1.1 and 1.8 days, respectively. Patients with weakness and vision loss waited a mean duration of 10.5 and 7.6 days, respectively, before coming to the ED. Seventy-five of the 569 ED visits (13.2%) were associated with a diagnosis of an MS relapse, and there were 43 admissions. Of the acutely relapsing patients who underwent magnetic resonance imaging (MRI), 61% had gadolinium-enhancing lesions. Eighty-four percent of patients received intravenous steroids. The mean length of stay for patients admitted for MS relapse was 6.5 days (median, 5 days; range, 1–24 days), with a total of 278 inpatient days for all MS relapses associated with admission by the ED. Conclusions: MS patients utilizing the Mount Sinai ED have high levels of disability and appear to be undertreated with DMAs. Emergent neurologic presentations are a substantial portion of ED visits, although relapses constitute a small fraction. While MS patients with altered mental status and seizure presented to the ED promptly, patients with symptoms consistent with an MS relapse, including weakness and vision loss, waited more than a week to be evaluated. MS relapses continue to warrant the use of both ED and inpatient neurology resources, and improved patient education is needed to ensure that MS relapses are addressed expeditiously.

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