(S09) RECURRENT AND MULTIPHASIC DISSEMINATED ENCEPHALOMYELITIS CASE SERIES

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Background: Disseminated encephalomyelitis (DEM) is an inflammatory demyelinating disease with no well-accepted diagnostic criteria or biological markers for the diagnosis. The course is usually monophasic. Recurrence and multiphasic presentations are rare. Objectives: To report clinical and radiologic features of patients with recurrent and multiphasic DEM. Methods: We describe three patients, two with recurrent and one with multiphasic DEM. Clinical and radiologic features will be provided. Results: Case 1 was a 42-year-old woman with distractibility, headaches, dysnomia, and dysgraphia. Brain magnetic resonance imaging (MRI) showed a large left temporal lesion. Cerebrospinal fluid analysis showed two oligoclonal bands. Brain magnetic resonance spectroscopy (MRS) was consistent with demyelination. She improved after intravenous (IV) steroids. Three months later, she developed incoordination and dysarthria. Brain MRI showed new enhancing lesions, and brain biopsy was consistent with demyelination. Case 2 was a 27-year-old woman with headaches, vomiting, and blurred vision. Brain MRI showed an enhancing right basal ganglia lesion, extending to the caudate and cerebral peduncle. Treatment with IV steroids resulted in clinical and radiographic improvement. Four months later, she developed seizures and respiratory distress and required intubation. Brain MRI showed involvement of the right basal ganglia, thalamus, and medulla, which had increased from the previous study. She received IV steroids and recuperated. Case 3 was a 38-year-old man with aphasia and tonic-clonic seizures. Brain MRI showed a large left temporoparietal cortical-subcortical lesion that was partially enhancing. Brain biopsy revealed demyelination and inflammation. The symptoms partially improved after IV steroid treatment. Seven-month follow-up brain MRI showed improvement and mild enhancement remaining in the temporal lesion. One-year follow-up MRI showed a new enhancing subcortical occipital lesion. The results of cerebrospinal fluid analysis, evoked potentials, and spinal MRI were all normal. The patient received steroid treatment and will continue to be followed. Conclusions: DEM must be considered in the differential diagnosis of MS. Radiologic characteristics can help distinguish the two, including extent of the lesions, involvement of gray matter, preference for basal ganglia, and thalamic and midbrain involvement. Early diagnosis and initial management may improve the clinical outcome.

Supported by: Maxine Mesinger MS Comprehensive Care Center

Disclosure: Nothing to disclose

Keywords: imaging and MS