(S19) NEUROMYELITIS OPTICA–IGG PRESENCE IN A SMALL COHORT OF PATIENTS WITH ATYPICAL PRESENTATION FOR MULTIPLE SCLEROSIS

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Background: Neuromyelitis optica (NMO, Devic's disease) is a severe, inflammatory central nervous system (CNS) demyelinating syndrome characterized by optic neuritis and acute myelitis. Recently, criteria for diagnosis were revised and simplified, and the presence of NMO antibodies was introduced as a supportive feature. Despite the traditional concept that the lesions of NMO are restricted to the spinal cord and optic nerve, new literature reported extra-optic-spinal CNS symptoms in 14% and brain lesions on magnetic resonance imaging (MRI) present in 60%. Objectives: To determine whether the serum autoantibody neuromyelitis optica–IgG (NMO-IgG), a specific marker for neuromyelitis optica, is present in patients with optic nerve and/or spinal cord inflammation in a cohort of patients with atypical presentation for multiple sclerosis (MS). Methods: NMO-IgG presence was assessed in 29 patients who presented to the neurology clinic with a diagnosis of demyelinating disease of the CNS with involvement of the optic nerve(s), spinal cord, and brain but with atypical features for relapsing-remitting MS. Results: NMO-IgG was detected in 4 of 29 patients (13.8%). Seven patients were considered to have NMO (24%), and all were African American females. All patients positive for NMO-IgG had extensive spinal abnormality, compared with only 42% of patients negative for NMO-IgG. In contrast, only 25% of patients positive for NMO-IgG had abnormalities on brain MRI, compared with 72% of patients negative for NMO-IgG. Conclusions: NMO as an atypical presentation of MS was more frequent in African American females. Patients with spinal cord involvement are more likely to be positive for NMO-IgG.

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