Comments on “first-ever optic neuritis: distinguishing subsequent neuromyelitis optica from multiple sclerosis”

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To the Editor,

Lim and colleagues compared ophthalmic findings and MRI features of 24 patients with neuromyelitis optica (NMO) and 55 patients with multiple sclerosis (MS) who initially presented with optic neuritis (ON) between 1993 and 2012, so as to identify factors distinguishing subsequent NMO from MS after first-ever ON [1]. They concluded that severe optic nerve damage at the first attack of ON was associated with subsequent development of NMO, whereas presence of brain MRI abnormalities was associated with developing MS [1]. Despite the clinical significance of this study, we have some concerns with regard to the inclusion of their study subjects.

The diagnostic criteria for NMO that were used in this study were proposed by Wingerchuk and colleagues in 2006 [2]. It included NMO-IgG, a newly detected serum reactivity, in the diagnostic criteria for NMO [2]. Although this proposal was made prior to independent confirmation of the diagnostic sensitivity and specificity of the test, NMO-IgG antibodies are suitable for differentiation between NMO and other autoimmune diseases of the central nervous system (CNS) including MS [3]. Neuromyelitis optica-IgG is the only parameter that so far allows

discrimination between MS and NMO with high specificity which targets the water channel protein AQP4 on astrocytes [4].

We wonder whether the authors detected NMO-IgG in their study. Since brain lesions are commonly recognized in neuromyelitis optica spectrum disorders (NMOSD) in which patients have been seropositive for NMO-IgG but have not fully met clinical criteria for NMO [5], some patients may present with brain symptoms as their first manifestation and develop recurrent brain symptoms without ON or myelitis [6].

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