Demographics of NMO patients in population of Isfahan

Fereshte Ashtari *[1], Mohammad Amin Najafi [2], Vahid Shaygannejad [3], Ali Safaei[4]

1-Professor of Neurology, Department of Neurology, Isfahan University of Medical Sciences, Isfahan, Iran
2-Medical student, Isfahan University of Medical Sciences, Faculty of Medicine, Isfahan, Iran
3-Professor of Neurology, Department of Neurology, Isfahan University of Medical Sciences, Isfahan, Iran
4-Medical student, Isfahan University of Medical Sciences, Faculty of Medicine, Isfahan, Iran

Background: Neuromyelitis optica Spectrum disease (NMOSD) is an idiopathic demyelinating disorder involving central nervous system (CNS) which was considered as a variant of multiple sclerosis (MS) that has been confirmed to be a distinct disease.

Objective: The aim of this study was assessment demographics of patients with NMO in center of Iran, Isfahan population.

Material and method: Among 2300 patients registered in our MS clinic, 45 patients diagnosed as NMO patients. The clinical symptoms, laboratory data, and MRI findings were collected and assessed by a neurology specialist.

Results: Female to male ratio was 5.4:1. The mean age of patients was 37.2± 10.8 (mean±SD; range: 19-62) years old. The mean age of disease onset was 29.8±11.2 (mean±SD ; range: 11-58). NMO antibody was positive in 46.6% of patients. First presenting symptoms were optic neuritis (ON) in 55.5%, transverse myelitis (TM) in 40% and brain stem deficit in 4.4% patients. Second attacks were manifested by ON in 51.1%, TM in 40 and brain stem deficit in 4.4% patients and 4.4% with no new presentations. The interval between the first and the second attack was 19.28 ± 31.27 months (range: 1 month- 17 years). The mean Expanded Disability Status Scale (EDSS) of the patients was 2.8±2.25 (mean±SD; range: 00-9). Higher frequency of long extending cervical plaque> 2 segments among men (85.7% in comparison to 52.6%) were not statistically significant.

Conclusion: According to our study the mean age of NMO onset among patients of Isfahan was considerably lower than other studies. We found higher frequency of long extending cervical plaque> 2 segments involvement among male patients in comparison with female patients that wasn't statistically significant but can suggest for more consideration in further studies.

Key words: neuromyelitis optica, NMOSD, demographics, age of onset, EDSS