

Demographic and Clinical Feature Among Patients with Neuromyelitis Optica in Iran

Sharareh Eskandarieh¹, Mohammad Ali Sahraian¹, Amir Reza Azimi¹, Abdalreza Naser Moghadasi¹, Sogol Koolaji¹, Narges Sistany Allahabadi¹

¹MS Research Center, Neuroscience Institute, Tehran University of Medical Sciences, Tehran, Iran

Background: Neuromyelitis optica (NMO) is a rare disease and epidemiological data on NMO are limited. The goal of this study was evaluation of demographic and clinical features of NMO in Caucasian population in Tehran, Iran.

Methods: A cross-sectional study among patients registered with NMO diagnosis was performed in Tehran during 2015–2016. We design a questionnaire to cover the epidemiological and clinical data of NMO in Tehran. Structured face-to-face interviews were conducted with 147 patients. The logistic regression was applied in analysis via software package SPSS.

Results: Among 147 patients, mean age was 36.09 years and 127 (86.4%) were female. Mean of disease onset age was 31.53 years. Totally, 61 (46.6%) patients had a history of head trauma with 59% NMO-Ig G positivity, but it was not significantly higher than patients with no history of head trauma ($p = 0.38$; odds ratio (OR) = 1.44 (0.72–2.87)). NMO-IgG was positive in 71 (54.2%) patients and did not differ significantly between male and female (female positivity = 56.3%, male positivity = 42.1%; $p = 0.32$). A total of 42.2% of patients had primary presentation by transverse myelitis (TM) and optic neuritis (ON). In the next rank were patients presented only with TM (25.9%) or ON (18.4%).

Conclusion: NMO is higher among female and younger age. Most NMO patients present with TM and ON. Sex and history of head trauma did not significantly influence NMO-IgG positivity.