

Cognitive function in patients with early multiple sclerosis in Asia: data from CogniMS, a worldwide longitudinal study

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Background: Cognition is recognized as an important marker for disease evolution in multiple sclerosis (MS) by the scientific community.¹ Within the first few years of the disease, cognition has been shown to influence patient employment and social functioning.² Longitudinal data on cognition in early MS patients is rarely documented. The CogniMS observational study collects longitudinal data from a large patient cohort worldwide. This is the first report on the neuropsychological characteristics of patients with early MS from Asia.

Objective: To measure cognition, fatigue, depression, health-related quality of life (HRQoL), and the interrelation of these parameters in patients with early MS in Asia.

Methods: Patients with early MS (diagnosed within 2 years) treated with interferon beta (IFNB)-1b were assessed every 6 months over 2 years. Cognitive function was assessed by the Paced Auditory Serial Addition Test (PASAT) and the Faces Symbol Test (FST). Fatigue was assessed by the Fatigue Severity Scale (FSS), depression by the Center for Epidemiologic Studies Depression scale (CES-D), HRQoL by the EuroQol-5 Dimensional questionnaire (EQ-5D).

Results: Recruitment has ended and baseline data are shown from 111 patients from Asia (South Korea 67; Taiwan 23; Thailand 21) (Table 1). Median age was 35.0 years and 70.0% of patients were female. Total (median) years of school attendance were 12; patient education types are shown in Figure 1. Median time since onset of MS symptoms was 14.23 months, median EDSS was 2.0. The median PASAT score was 48.0 and 19.2% of patients were likely impaired. The median FSS total score was 4.05. In 55.0% of patients, FSS scores were suggestive of fatigue and 25.0% of CES-D scores indicative of depression. The median EQ-5D index score and the EQ-5D visual analog scale were 0.69 and 70.0, respectively.

Conclusions: Unique observational data relating to cognition, fatigue, depression, and HRQoL in Asian patients with early MS treated with IFNB-1b are presented. The longitudinal data of these patients will elucidate the pattern in cognitive and emotional variables over time. Further refinements and data collection are necessary to validate current scales.

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References

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2. Amato M, Ponziani G, Praccucci G, *et al.* Cognitive impairment in early-onset multiple sclerosis. *Arch Neurol* 1995; 52:168-72.

Table 1: Baseline demographics and MS history for patients from Asia in the CogniMS Study

Baseline demographics	
Total number of patients	111
South Korea	67
Taiwan	23
Thailand	21
Age at study inclusion, years (median)	35.0
Gender	
Male (%)	30.0
Female (%)	70.0
Total years of school attendance (median)	12.0
MS history	
Time since onset of clinical symptoms of MS, months (median)	14.23
Age at onset of clinical symptoms of MS, years (median)	34.0
Time since diagnosis of MS, months (median)	2.46
EDSS at study inclusion (median)	2.0

MS = multiple sclerosis; EDSS = Expanded Disability Status Scale

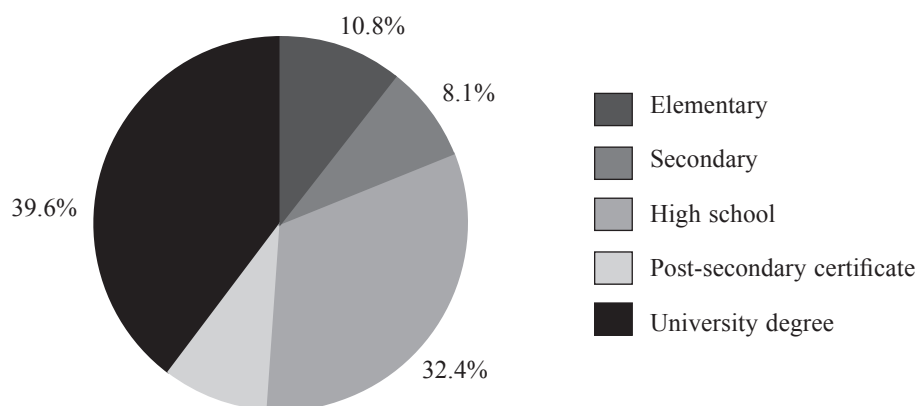


Figure 1: Patient education types in patients from Asia in the CogniMS Study