A LONGITUDINAL STUDY OF COGNITIVE FUNCTIONS IN PATIENTS WITH NEUROMYELITIS OPTICA


Neuromyelitis optica (NMO) is a central nervous inflammatory disease characterized by optic neuritis and longitudinally extensive acute transverse myelitis which may be monophasic or more frequently relapsing, usually without brain lesions. We recently demonstrated that NMO patients suffer from cognitive deficits that are similar to multiple sclerosis patients.

The study aimed to evaluate the evolution of cognitive functions over a twelve-months period in 33 patients with NMO.

33 patients diagnosed with NMO, defined following recently revised criteria (Wingerchuk et al., 2006), were tested with the BCcogSEP, a French translation of the Brief Repeatable Battery for Neuropsychological examination to explore cognitive functions. Patients were assessed at inclusion and twelve months later.

After first assessment, 61% of NMO patients had cognitive impairments defined by more than 4 subtests failed in the BCcogSEP. The results of cognitive tests showed impairments in the following tests: the symbol digit modalities tests, the selective reminding test, the 3-second PASAT, so abnormalities especially concern the speed of information processing and the executive functions. These performances show a dysexecutive profile with cognitive slowing related to the frontal-subcortical dysfunction.

At time retest of patients after 12 month period is ongoing. Results of second BCcog test will be compared to first one.