Abstract

Background: Cognitive impairment in multiple sclerosis (MS) is common (45-65%). Deficits occur in speed of information processing (SIP), memory, attention, executive functions (EF) and visuoconstruction. Involvement of cognitive functions like language and gnosis is rare and lesser known. Our aim is to describe the cognitive function and the clinical and radiological features of five patients with MS and with neuropsychological syndromes (NPS). Method: Retrospective review of MS patients with NPS studied, using specific tests of SIP, memory, attention, EF, visuo-spatial abilities, praxis and language. Results: The sample included four women (3 relapsing-remitting MS/1 secondary progressive MS) and one man with primary progressive MS (aged between 30-55 years). Cognitive symptoms were the initial complaint in three cases. Three cases presented apperceptive agnosia and constructive apraxia, one case presented alexia with agraphia and the fifth patient presented motor aphasia. Four patients suffered cognitive dysfunction considered typical of MS. Magnetic resonance imaging (MR) in all cases showed high lesion volumes in T1 and T2-weighted sequences. A good correlation was observed between cognitive deficits and the location of the lesions in four patients. Conclusions: NPS may be the initial complaint in MS patients, often associated with other cognitive deficits, and it shows a close relationship with lesion location.

Keywords
Multiple sclerosis, neuropsychological syndrome, cognitive impairment, visual gnosis, aphasia.