Efficacy of group cognitive rehabilitation therapy in multiple sclerosis.

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Abstract
OBJECTIVE: Cognitive impairment occurs in 40%-65% of patients with multiple sclerosis (MS). Several techniques for cognitive rehabilitation (CR) in these patients have been evaluated; however, the results have been controversial. In this study, we investigated the efficacy of group compensatory CR in patients with MS-related cognitive impairment.

MATERIALS AND METHODS: Thirty-four female patients with diagnosed relapsing-remitting MS and evidence of impaired cognitive function were included and randomized to intervention (n = 17) and control (n = 17) groups. CR intervention consisted of eight 2-hour sessions of comprehensive group CR over a 4-week period that focused on improvement of memory, attention, and executive function. As placebo, the control group received the same number of non-therapeutic group sessions. Assessment of cognitive function was performed before intervention (pretest), at the end of intervention (post-test), and 3 months later (follow-up).

RESULTS: The study population included 34 patients with a mean age of 35.5 years. Statistical comparison of memory assessments at 3-month follow-up showed significantly higher scores in the CR group than in the control group (93.33 vs 86.40 for Addenbrooke’s Cognitive Examination test and 16.58 vs 12.00 for visual memory, 19.32 vs 14.05 for verbal memory, and 51.28 vs 44.41 for general scores on the Memory Functioning Questionnaire test, respectively). Wisconsin card sorting test score comparison showed significantly lower total time consumption in the CR group than in the control group (308.1 vs 340.8 seconds, respectively). Behavior rating inventory of executive function-adult scores in all four subtests were significantly higher in the CR group than in the control group (40.25 vs 55.4 for behavioral regulation index, 51.16 vs 68.6 for metacognition index, and 97.41 vs 124.00 for global executive composite, respectively). Attention was the only domain in which we did not observe any significant variation between groups in terms of post-test and follow-up scores.

CONCLUSION: This study supports the efficacy of group CR in the improvement of cognitive function in patients with MS.

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