

## **Computer-assisted memory retraining of patients with multiple sclerosis**

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**Abstract** This study aimed to assess the efficacy and specificity of direct computer-assisted memory retraining (CR) in MS patients, in comparison to non-specific retraining, while controlling for severity of impairment, psychiatric symptoms and retest effects. Sixty patients with definite MS and a stable clinical condition were selected. All were assessed neuropsychologically and divided into three matched groups. One group received an 8-week specific CR programme (SCRp) and another received a non-specific 8-week CR programme (NCRp) to retrain attention; a third (control) group received no treatment. After the programmes were completed, all patients were reexamined with the same test battery. Patients were impaired on all 11 memory and attention tests at baseline. Those who received SCRp improved on 7 memory outcome measures, compared to only 1 in the NCRp group and none in the control group. Attention training had no significant effect on relevant outcome measures. Some non-retrained patients showed deterioration of cognitive performance at retest. These results indicate that direct memory training in MS patients is effective in the short-term and is specific. In selected cases, benefits extended to everyday life activities.

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