

Effectiveness of a cognitive rehabilitation intervention as an adjunct to acetylcholinesterase inhibitor (AChE-I) treatment on patients with mild Alzheimer's disease: A preliminary study

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Abstract

Objective: To study the efficacy of cognitive rehabilitation intervention as an adjunct to acetylcholinesterase inhibitor (AChE-I) treatment as compared to AChE-I group alone in patients with mild Alzheimer's disease. **Method:** Nine patients with mild Alzheimer's disease treated with Standard pharmacological treatment ('cholinesterase inhibitors' (Donepezil-10 mg and Rivastigmine-12 mg as capsule or 10 units as patches for more than two months) were randomly allocated to study group (n=5) and control group (n=4). All the patients in both the groups were pre and post assessed through cognitive tests which included remote memory, recent memory, attention/concentration, new learning ability and recognition ability along with activities of daily living scale, social support and quality of life domains. Institute ethical clearance was obtained and the informed written consent was taken from the patients. **Results:** Due to small sample size, median values between the groups were compared using Wilcoxon rank-sum test post intervention. Median values of MMSE [study group:19 (18 to 27); Control Group:15 (10 to 20)]; Remote Memory [Study group:-3.3 (-3.4 to 0.24); Control Group: -4.7 (-4.7 to -4.7)]; Simple Memory [Study group:-0.7 (-2.61 to 1.1); Control group: 55 (44 to 57)]; and QoL- Psychological domain [Study group: 0.54 (-3.39 to 1.92); Control group: -1.27 (-1.71to -0.76)] were higher in the study group as compared to the control group suggesting improvement in the above mentioned domains, however, statistically non-significant (p=0.05). Similarly, post intervention, median values of ADLs [Study group: 30.9 (15 to 60); Control group: 7 (5 to 75)] were lower in the study group as compared to the control group indicating clinically significance, however statistically non-significant (p=0.05). **Conclusion:** The combined treatment group showed potential to positive treatment effect on cognitive/neuropsychological tests applied to patients suggesting that cognitive rehabilitation associated with AChE-I treatment can potentially be useful to stabilize or improve cognitive and functional performance of patients with mild Alzheimer's disease and can improve their quality of life. However, an adequate sample size is required to confirm it.

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Biography

Swati Bajpai has completed her Post graduation in Clinical Psychology and currently pursuing PhD in Clinical Neuropsychology from All India Institute of Medical Science, 2013. (Development and Validation of Cognitive Rehabilitation Intervention (RECREATE) on Memory, Language, Attention and Quality of Life in Patients with Mild Alzheimer Disease.) Recently, she has been awarded Gandhi Scholar of the year 2015 for

neuro-rehabilitation work and has 6 international publications. She has also worked as Psychologist in National Institute of Health (NIH) funded multi-centric project for 2 years and later worked as Senior Research Fellow (SRF) in project entitled "Preclinical Predictors of progression of cognitive decline in MCI and AD Using a Multitasking paradigm.