

Autobiographical memory facilitation in multiple sclerosis: a neuropsychological and neuroimaging approach

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Background and aims: In a clinical-first study, we showed an autobiographical memory (AbM) impairment in non-depressed multiple sclerosis (MS) patients. Data suggested an access deficit. On this basis, a mental visual imagery (MVI)-based facilitation programme was created. *Aim:* To assess the efficacy of this programme for supporting AbM retrieval, by testing both clinical and cerebral network changes before and after facilitation. *Method:* A first group of MS patients underwent neuropsychological assessment and a stringent AbM test, followed by our facilitation programme, which consisted of MVI exercises of increasing difficulty. A post-facilitation reassessment of AbM was conducted afterwards. Ten controls also received the AbM test twice. A second group of patients is currently following the same procedure within a pre-/post-facilitation fMRI study design. fMRI tasks are then conducted before and after the facilitation programme and involve evoking past personal events. Results: To date, all the patients who followed the facilitation programme have shown a significant improvement on the AbM test, while the controls' scores remained stable. Furthermore, patients' feedback supported the beneficial effects of the intervention. fMRI data on the first two patients showed enhanced activity in posterior cerebral regions after the facilitation programme. *Conclusions:* Clinically, this programme based on MVI has been found to be beneficial to access AbMs in these patients. Our fMRI study could confirm these findings, at least in some patients.

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SESSION 5: INTERVENTION OUTCOMES AND THE EVIDENCE BASE

Efficacy of a Multi-Family Group Intervention following brain injury

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Background and Aims: Multi-family group interventions (MFG) (McFarlane 2003) involve participation of individuals with a health condition and their family members in facilitated groups incorporating psycho-education, problem-solving and social networking. The Headstart program examined the impact of a modified 12-week MFG program for families affected by acquired brain injury (ABI) on family functioning, community integration and emotional distress. *Method:* The study employed a waitlist control design, with a 12-week baseline, followed by 12-week group participation. Participants included 41 individuals with brain injury (83% TBI), with a mean age of 39.36 years (SD = 14.53) and 41 family members with a mean age of 53.31 years (SD = 12.02), predominantly parents (53.7%) or spouses/partners (31.7%). Outcome measures completed at the beginning and end of each phase by both the person with a brain injury and their family member included the