

EVALUATION OF THE EFFECTIVENESS OF HOME BASED OR HOSPITAL BASED CALISTHENIC EXERCISES IN PATIENTS WITH MULTIPLE SCLEROSIS

I. Mirzayev, N. Özaras, M. Guneser, T. Aydın, A. Celebi

Bezmialem Vakif University Faculty of Medicine, Department of Physical Medicine and Rehabilitation, Istanbul, Turkey

Multiple sclerosis (MS) is chronic, inflammatory, demyelinating disease of central nervous system that may result in significant damage in neuromuscular system. In patients with MS, problems in mobility and balance, cognitive and autonomic dysfunction, and muscle weakness are main factors leading to disability. Besides medical treatment, it's important that patients with MS must also follow an exercise program.

Patients who applied to Physical Medicine and Rehabilitation and Neurology outpatient clinics of Bezmialem University Hospital in Istanbul/Turkey between 2011/2012, diagnosed with MS were included in this prospective study. 20 Patients were enrolled in hospital-based exercise group, while 20 further patients were enrolled in home-based exercise group. Both groups were applied exercise programs 5 days a week for 12 weeks. Calisthenic exercises were focussed on large muscles, were applied rhythmically and in combination with breathing exercises. Calisthenic exercises are consecutive and repetitive exercises aimed at training large muscle groups through aerobic and step routines that include regional training sequences and end with 5-minute rest.

Assessments were made at baseline and after 12 weeks of exercise; using Berg Balance Scale , Multiple Sclerosis International Quality of Life Scale , Hospital Anxiety and Depression Scale , and Fatigue Severity Scale .

After 12-week programme, home & hospital groups showed significant improvements in terms of BBS, HADS-A and MusiQoL scores. There was significant improvement in hospital group and significant deterioration in home group according to HADS-D score.