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Efficacy of Transcranial Magnetic Therapy on Balance in Patients with Stroke

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Abstract : Background: The aim of this work was to investigate the efficacy of Transcranial Magnetic Therapy (TMT) on balance in hemiparetic stroke patients. It was conducted in outpatient clinic and in BIODEX balance system lab in Faculty of Physical Therapy, Cairo University. Subjects and Methods: Thirty hemiparetic stroke patients from both sexes represent the sample of this study. The patients' ages ranged from 45 to 55 years. They were assigned randomly into two equal groups; the study group (GA) and the control group (GB). control group treated by selected therapeutic physical therapy program. GA treated by the same program of treatment as the GB in addition to TMT. The duration of treatment was six weeks, three times weekly.day after day. The different aspects of dynamic balance (overall stability, anteroposterior stability and mediolateral stability indices) were assessed pre and post treatment objectively by Biodex balance system and clinically by Short Form of Berg Balance Scale (SFBBS) in both groups. Results: Comparison of each variable pre and post treatment in each group revealed a significant improvement in all different parameters in both groups (p < 0.01), however comparison between post results revealed that the GA showed a high significant improvement higher than the GB in all different variables.

Keywords: stroke, TMT, SFBBS, biodex balance system

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