

Comparing routine neurorehabilitation program with trunk exercises based on Bobath concept in multiple sclerosis: Pilot study

Ilke Keser, PhD, PT; Nuray Kirdi, Prof PhD, PT;
Aydin Meric, PhD, PT; Asli Tuncer Kurne, MD;
Rana Karabudak, Prof MD

- Aim
 - Compared trunk exercises based on Bobath concept with routine neurorehabilitation approaches in multiple sclerosis (MS).
- Relevance
 - Most routine neurorehabilitation programs concentrate on limb exercises.
 - Although loss of selective trunk control is associated with balance, gait, and arm/hand limitations, few studies have looked at effectiveness of trunk exercises in MS population.

- Participants with MS joined 3 d/wk rehabilitation program for 8 wk.
 - Experimental group: Trunk exercises based on Bobath concept.
 - Control group: Routine neurorehabilitation exercises.
 - Both groups: Balance and coordination exercises.
- Before and after program, evaluated with:
 - Trunk Impairment Scale (TIS), Berg Balance Scale (BBS), International Cooperative Ataxia Rating Scale (ICARS), and Multiple Sclerosis Functional Composite (MSFC).

- Within Groups:
 - TIS, BBS, ICARS, and MSFC scores and strength of abdominal muscles were significantly different after treatment in both groups.
- Between Groups:
 - No significant differences in any parameters.

Conclusion

- Trunk control exercises based on Bobath concept:
 - Were as effective as more commonly used limb exercises.
 - May be beneficial option when physiotherapist needs to vary exercise program to help patients develop regular exercise habits and stay motivated.