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# The Benefits of Hippotherapy in the Management of Stroke Patients in the Post-Stroke Phase

**Topic:** Miscellaneous

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## BACKGROUND

Post-stroke rehabilitation requires a multidisciplinary approach. Hippotherapy is a promising complementary therapy that may enhance patient adherence by providing an alternative to traditional settings. This trial assessed effects of hippotherapy on quality of life and motor functions in stroke recovery.

## METHODS

To date, 39 participants were randomly assigned to two groups, the control group (CG) and the experimental group (EG). The CG underwent traditional rehabilitation, while the EG combined it with a 45-minute hippotherapy session per week for 12 weeks. Assessments conducted during the pre-test (T0), post-test (T1) and three-month follow-up (T2) focused on quality of life (Short-Form Health Survey [SF-36]), functional independence (Timed Up and Go [TUG], Timed Chair Stands [TCS], and Tinetti Test) and balance (force platform and ABC scale). Well-being was assessed pre/post hippotherapy sessions in the EG using Visual Analogic Scales. Independent and paired Student's t-tests, along with their non-parametric equivalents, as well as two-way repeated measures ANOVAs, were used to analyze the treatment effect on the variables of interest. Analyses were conducted on an intention-to-treat basis.

## RESULTS

No significant improvement was found for the SF-36. However, patients in the EG showed a significant improvement of wellbeing after most hippotherapy sessions ($p < 0.05$). An improvement in TUG was found within the CG (p-values between T0-T1 and T0-T2 = 0.005 and 0.026, respectively), while the EG showed not significant minor improvements. For the TCS, both groups exhibited slight improvements, but none were significant. Tinetti scores improved in the EG between T0 and T2 for the balance, gait, and total scores, and these changes cannot be definitively attributed to hippotherapy. The ABC scale showed no differences between groups.

## CONCLUSION

Although no clear advantage of hippotherapy over standard rehabilitation was found, well-being improved post-session. Limited statistical power remains as recruitment continues toward 50 patients. Despite this, results suggest hippotherapy's potential as a valuable complementary therapy, enhancing adherence and offering an enriching extramural approach in post-stroke rehabilitation.

**Statement of Disclosures**

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