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The Impact of Radial Shock Wave Therapy on Lower Limb Spasticity in Cerebral Palsy: Results From a Randomized Controlled Clinical Trial

Topic: Physical Modalities

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BACKGROUND

Spasticity in the lower limbs is a common and debilitating symptom in children with cerebral palsy (CP). Extracorporal Shock wave therapy (ESWT) has emerged as a potential treatment option for spasticity management. To evaluate the efficacy of SWT in reducing lower limb spasticity in children with CP.

METHODS

Thirty children with CP and lower limb spasticity were randomly assigned to either the SWT group or the control group. The SWT group received [type] SWT, while the control group received [type] intervention. Spasticity was assessed using the Modified Ashworth Scale (MAS). Passive range of motions (PROM), 10 meter walk test (10MWT) and baropodometric examination Gait cadence stride length, peak plantar pressure) were assessed at baseline (t0), after one month (t1) and two months (t2).

RESULTS

Thirty children met our inclusion criteria and were divided into two groups. The Toxin group showed a significant improvement in clinical parameters at t1, but this improvement diminished at t2. In contrast, the Toxin and ESWT group showed improvement in all parameters at both t1 and t2. The comparison between the two groups showed a statistically significant difference for gait cadence, 10MWT, range of motion (ROM), and MAS at two months in the RSWT+Toxin group.

CONCLUSION

Extracorporal Shock wave therapy is an effective and safe treatment for reducing lower limb spasticity in children with CP. These findings suggest that SWT may be a valuable addition to the comprehensive management of spasticity in this population.

Statement of Disclosures

None

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