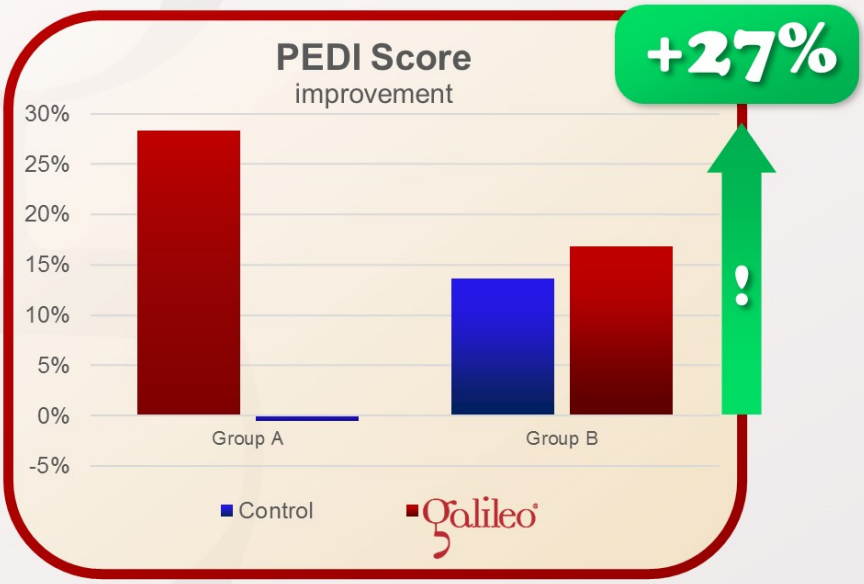
Is Galileo Training at high frequencies safe for toddlers with Cerebral Palsy ?

The answer is: YES

This study tested the safety and the effect of home-based Galileo Training (Galileo Tilt-Table Baby, 14 weeks, alternating 12Hz and 22Hz) for toddlers age 1 to 2 years (GMFCS II-IV). It proved that Galileo Training even at 22Hz and for toddlers 12 to 24 months is save, feasible and has a high compliance (PEDI, pediatric evaluation of disability inventory questionnaire, cross-over study design with groups A and B).



Stark C, Herkenrath P, Hoebing L, Semler O, Duran I, Schoenau E, et.Al.: Early vibration assisted physiotherapy in toddlers with cerebral palsy - a randomized controlled pilot trial.; J Musculoskelet Neuronal Interact, 16(3):183-92, 2016; PMID: 27609033; GID: 4232

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Early vibration assisted physiotherapy in toddlers with cerebral palsy - a randomized controlled pilot trial.

Stark C[1], Herkenrath P, Hollmann H, Waltz S, Becker I, Hoebing L, Semler O, Hoyer-Kuhn H, Duran I, Hero B, Hadders-Algra M, Schoenau E.

Abstract

OBJECTIVES: to investigate feasibility, safety and efficacy of home-based side-alternating whole body vibration (sWBV) to improve motor function in toddlers with cerebral palsy (CP).

METHODS: Randomized controlled trial including 24 toddlers with CP (mean age 19 months (SD±3.1); 13 boys).

INTERVENTION: 14 weeks sWBV with ten 9-minute sessions weekly (non-individualized). Group A started with sWBV, followed by 14 weeks without; in group B this order was reversed. Feasibility (≥70% adherence) and adverse events were recorded; efficacy evaluated with the Gross Motor Function Measure (GMFM-66), Pediatric Evaluation of Disability Inventory (PEDI), at baseline (T0), 14 (T1) and 28 weeks (T2).

RESULTS: Developmental change between T0 and T1 was similar in both groups; change scores in group A and B: GMFM-66 2.4 (SD±2.1) and 3.3 (SD±2.9) (p=0.412); PEDI mobility 8.4 (SD±6.6) and 3.5 (SD±9.2) (p=0.148), respectively. In two children muscle tone increased post WBV. 24 children received between 67 and 140 WBV sessions, rate of completed sessions ranged from 48 to 100% and no dropouts were observed.

CONCLUSION: A 14-week home-based WBV intervention was feasible and safe in toddlers with CP, but was not associated with improvement in gross motor function.

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