<table>
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<th>Study</th>
<th>Intervention</th>
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<th>Parameters for TT</th>
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<tr>
<td>Begnoche et al. (2007)</td>
<td>4 weeks, 3-4 sessions per week, for 2 h per session, 3-5 bouts per session (15-35 min) (1 child only did 3d/wk, 4 did 4d/w)</td>
<td>Intensive traditional physical therapy treatment technique (NDT, therapeutic exercises, myofascial release, kinesiotape, therapeutic activities) with PBWSTT in each session.</td>
<td>1. BWS: %BWS, incremental changes determined by gait mechanics of the child.</td>
<td>1. Gross Motor Function (GMFM)</td>
<td>Impairment (Activity Limitation)</td>
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<td></td>
<td>1. BWS: %BWS, incremental changes determined by gait mechanics of the child.</td>
<td>A Gait Keeper™ 1800L Treadmill (Mobility Research, Tempe, AZ) for PBWSTT, Standard Walk Able™ (Mobility Research, Tempe, AZ)</td>
<td>2. Speed*: Treadmill speeds ranged from 0.1 to 4.0 mph (0.0447 m/s to 1.79 m/s), adjustable in 0.1 mph (0.0447 m/s) increments. Speed of treadmill determined by gait mechanics of the child.</td>
<td>2. Functional status (PEDI)</td>
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<td>2. Speed*: Treadmill speeds ranged from 0.1 to 4.0 mph (0.0447 m/s to 1.79 m/s), adjustable in 0.1 mph (0.0447 m/s) increments. Speed of treadmill determined by gait mechanics of the child.</td>
<td>Harness: Overhead four-point adjustable suspension system, Y shaped yoke connecting pediatric pelvic harness worn by participant.</td>
<td>3. Footwear/orthotics: Participant 1 and 2 did not wear AFO, participant 5 wore AFO 50% of the time, and participants 3, 4 wore AFOs 100% of the time.</td>
<td>3. Gait Speed (10 METER WALK TEST)</td>
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<td>3. Footwear/orthotics: Participant 1 and 2 did not wear AFO, participant 5 wore AFO 50% of the time, and participants 3, 4 wore AFOs 100% of the time.</td>
<td>4. Facilitation information: One physical therapist positioned behind the child to facilitate the movement and gait.</td>
<td>4. Spatial Gait Parameters (PEDOGRAPH)</td>
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<td>Cherng et al. (2007)</td>
<td>A total of 12 weeks, 2-3 sessions/week, 20 min/session (rest periods not identified) in addition to their regular therapeutic exercise program according to NDT philosophy</td>
<td>A commercial treadmill (Trackmaster TM210/AC)</td>
<td>1. BWS: Determined by clinical judgment. Weight was monitored to be sufficient to avoid knee collapse during single limb support phase, did not keep a record.</td>
<td>1. Gross Motor Function (GMFM)</td>
<td>Activity Limitation (Impairment)</td>
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<td>Harness: Litegait (Litegait, Scottsdale, AZ) including several parts, a yoke, overhead straps, an adjustable harness, a base and an actuator.</td>
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<td>2. Speed: Treadmill speed started from 0.0 mph (0 m/s) and gradually increased in increments of 0.1 mph (0.0447 m/s).</td>
<td>2. Muscle Tone (MODIFIED ASHWORTH SCALE)</td>
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<td>2. Speed: Treadmill speed started from 0.0 mph (0 m/s) and gradually increased in increments of 0.1 mph (0.0447 m/s).</td>
<td>3. Footwear/orthotics: not identified</td>
<td>3. Gait Speed (10 METER WALK TEST)</td>
<td>3. Motor Control (SELECTIVE MOTOR CONTROL)</td>
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<td>Day et al. (2004)</td>
<td>10 weeks with 3 sessions per week, then 11 weeks for 2 sessions per week, total 44 sessions, 1 to 1.5 hours in each</td>
<td>Biodex RTM 400 Rehabilitation treadmill (Biodex Medical Systems, Inc., Shirley, NY)</td>
<td>1. BWS: BWS was at 60% and decreased gradually from 60% to 20%.</td>
<td>1- Gross Motor Function (GMFM)</td>
<td>Activity Limitation (Impairment)</td>
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<td>Base of treadmill was 20x64 in. with</td>
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<td>2. Speed: Treadmill speed from 0 to 8 mph (0 to 3.58 m/s) in 0.1 mile increments.</td>
<td>2- Functional status (PEDI)</td>
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</table>
A 6-inch step-up

Harness: A pneumatic lift (Neuro II; Vigor Equipment Inc., Stevensville, MI) to support boy's body weight and a harness (Medical Harness; Robertson Harness, Henderson, NV) to support the child

A motorized treadmill (Paragon CR; Horizon Fitness, Morel, Australia)

Harness: PBWS was provided by Walk Able (Mobility Research, Tempe, AZ) including a harness and a custom made harness was used for children who required greater trunk and neck support

a 6-inch step-up

Harness: A pneumatic lift (Neuro II; Vigor Equipment Inc., Stevensville, MI) to support boy’s body weight and a harness (Medical Harness; Robertson Harness, Henderson, NV) to support the child

A motor driven treadmill: brand/type not identified

Harness: A harness suspended from a hydraulic weight support system (LiteGait I system; Mobility Research, AZ, USA)

A motor-driven treadmill: brand/type not identified

Harness: A hydraulic weight

3. Footwear/orthotics: Wore light-weight, thin, rubber soled beach shoes, no socks and no AFOs.

4. Facilitation information: Four assistants, 1 assistant for each leg, 1 assistant sat behind the child for trunk stabilization and upright postural alignment, 1 assistant was utilized for recording starting, stopping the treadmill, adjusting treadmill speed and BWS, child's physical therapist served as an assistant for motivation.

1. BWS: not identified
2. Speed: Treadmill had minimum speed of 0.0621mph (0.0278m/s); with increments of 0.0621mph (0.0278m/s). Median treadmill speed was increased from 0.249 to 0.373mph (0.111 to 0.167m/s).

1. BFS: not identified
2. Speed: Treadmill had minimum speed of 0.0621mph (0.0278m/s); with increments of 0.0621mph (0.0278m/s). Median treadmill speed was increased from 0.249 to 0.373mph (0.111 to 0.167m/s).

1. BFS: BWS decreased from 30% to 0 % by the end of training
2. Speed: Speed ranged from 1.49 to 1.93mph (0.667 to 0.861m/s) initially and increased to 2.3 to 3.11mph (1.03 to 1.39m/s).

1. Gross Motor Function, Walking (GMFM, Dimension 1)
2. Walking endurance (6 MINUTE WALK TEST)
3. Gait speed (10 METER WALKING SPEED TEST)
4. Cortical Activation & Brain Plasticity Marker (fMRI) during active ankle dorsiflexion of involved ankle, finger tapping of uninvolved hand and repeat of ankle dorsiflexion

1. Walking performance (SELF SELECTED 10 METER WALKING SPEED TEST), 2. Walking Performance, endurance, speed (10 MINUTE WALK TEST)
3. Walking (GMFM Dimension 2)
4. Cortical Activation & Brain Plasticity Marker (fMRI) during active ankle dorsiflexion of involved ankle, finger tapping of uninvolved hand and repeat of ankle dorsiflexion

2. Walking endurance (6
rest period; as the study progressed participants increased walking time up to 30 minutes, 12 total sessions of training.

The rehabilitation was the TT itself; did not receive any therapy or co-intervention besides the TT.

Richards et al. (1997)
4 months, 4 times per week for 45 minutes in each session, rest periods not identified.

Conventional therapy (NDT) continued with PBWSTT in each session.

A customized treadmill: brand/type not identified.

Harness: A special overhead structure supported the harness (developed by the Orthotics Department at CCV).

1. BWS: not identified
2. Speed: Speed and increments were determined by characteristics of motor and drive shaft and the custom-made remote control. No additional detail in article.
3. Footwear/orthotics: not identified.
4. Facilitation information: A physical therapist sat a bench at the back of treadmill while assisting the child.

Schindl et al. (2000)
3 months, 2-3 session per week, total of 36 sessions. Each session 30 minutes total walking time (including 5 minutes of donning and doffing), walking at least 5 minutes and maximum 10 minutes before breaks

A motor-driven treadmill: brand/type not identified.

Harness: Modified parachute harness suspended vertically via ropes and pulleys.

1. BWS: BWS ranged from 0% to 40%, with a mean value of 14%.
2. Speed: Adjusted to a comfortable cadence and stride length of each patient. Speed was 0.514mph (0.313-0.94mph) (0.23m/s (0.14-0.42m/s) at the beginning and increased continuously to a mean of 0.761mph (0.559-1.05mph) (0.34m/s (0.25-0.47 m/s)) at the end of therapy.
3. Footwear/orthotics: Children wore custom-made orthopedic shoes; additional braces or splints were not required.
4. Facilitation information: Two NDT-trained physical therapists helped the movement of both lower limbs by sitting at the side of treadmill at the beginning of training and support was decreased as soon as possible during the training.

**Provost and Phillips papers report on different outcomes from the same study, *Speed is converted and reported in mph and m/sec for all studies.**


**MINUTE ENDURANCE WALK**
3. Gait Speed (10 METER WALKING VELOCITY)
4. Energy Cost (ENERGY EXPENDITURE INDEX)
5. Static Balance (SINGLE LEG BALANCE MEASURE)

1. Gross Motor Function (GMFM)
2. Measure of gait spatiotemporal parameters (CLINICAL GAIT VIDEOGRAPHIC TEST)
3. Gait Evaluations (LABORATORY GAIT EVALUATIONS)
4. Locomotor Performance (SWAPS)

2. Gait Ability (FAC)
3. Overall impression of children and caregivers (SUBJECTIVE)

Activity limitation