

Flex Therapist CEUs

Cerebral Palsy Motor Control Advancements

A Study to Analyze the Effectiveness of Functional Strength Training in Improving Gross Motor Function among the Children with Spastic Diplegic Cerebral Palsy

1. Above the hips, persons with spastic diplegia typically retain normal or near normal:

- A. Muscle tone
- B. ROM
- C. Both (A) and (B)
- D. None of the above

2. Which impairment of spastic diplegic children may limit the performance of gross motor and fine motor control and participation in daily life?

- A. Spasticity in lower limbs
- B. ROM deficits
- C. Selective motor control problems
- D. All of the above

3. Traditional physiotherapy used in children with CP has been shown to improve all of the following, except for:

- A. Nerve damage
- B. Muscle strength
- C. Local muscular endurance
- D. Overall joint ROM

4. Functional strength training has shown that task specific training yields long lasting cortical reorganization specific to the areas of the brain being used with a task.

- A. True
- B. False

5. Spastic diplegic children often have more impairments in the movement areas than the sensory areas due to the involvement of the:

- A. Motor cortex
- B. Cortico spinal tract

- C. Basal ganglia
- D. All of the above

6. Due to not normally being activated, it could be assumed that all of the following are weaker than in individuals with a normal walking pattern, except for:

- A. Antagonist muscles
- B. Hip adductors
- C. Hip abductors
- D. Hip extensors

7. The results show that there is an improvement in gross motor function, particularly with _____ after 10 weeks of a functional strength training program.

- A. Walking
- B. Running
- C. Jumping
- D. All of the above

Effect of Cage Therapy using Advanced Spider Suit Compared to Traditional Physical Therapy on Gross Motor Function in Children with Cerebral Palsy - An Indian Experience

8. The Cage Therapy Unit system improves strength, passive and active range of motion, and muscle flexibility, allowing the therapist to isolate and target any muscle group.

- A. True
- B. False

9. The “Monkey Cage” is an effective tool for implementing neurodevelopment treatment, one of the most wide-spread and clinically accepted methods for reprogramming the central nervous and neuromuscular systems and “teaching” the brain more adequate motor skills.

- A. True
- B. False

10. A Traditional Physical Therapy Program is designed of specific sets of exercises to work toward which important goal?

- A. To maintain or improve muscle property.
- B. To avoid contractures and to improve the child’s motor development.
- C. Activities and muscle re-education exercises to improve flexibility, strength, balance, and co-ordination.

D. All of the above.

11. The Cage Therapy system using the Advanced Spider Suit is a more effective and beneficial therapy than Traditional Physical Therapy in improving _____ in children with CP.

- A. Fine motor function
- B. Gross motor function
- C. Both (A) and (B)
- D. None of the above

Role of Spider Cage in Motor Control in Cerebral Palsy

12. The universal exercise unit can be used in adjunct to various different traditional physical therapy treatments such as strength training, stretching, functional training, and weight bearing on joints.

- A. True
- B. False

Infra-low Frequency Transcranial Magnetic Stimulation Effectively Improves the Motor Function in Children with Spastic Cerebral Palsy

13. This study found that the relative power of GABA in spastic CP is higher than that in healthy controls and is reduced significantly after ILF-TMS treatment for 3 months.

- A. True
- B. False

14. This study found that the relative power of glutamate in spastic CP is higher than that in healthy controls and is reduced significantly after ILF-TMS treatment for 3 months.

- A. True
- B. False

15. ILF-TMS treatment improved the performance of CP children on:

- A. Gross motor functional measure
- B. Fine motor function measure
- C. Both (A) and (B)
- D. None of the above

Transcranial Magnetic Stimulation Therapy in Spastic Cerebral Palsy Children Improves Motor Activity

16. High frequency rTMS stimulates the _____ area of the brain, which facilitates motor function.

- A. Motor cortex
- B. Somatosensory cortex
- C. Both (A) and (B)
- D. None of the above

17. Improvements in paretic extremities with rTMS have been reported in stroke patients when the traditional rehabilitation had failed.

- A. True
- B. False

18. The administration of high frequency of rTMS prior to PT can lead to significant progress in motor function in spastic CP children which can be attributed to the significant reduction in:

- A. Muscle tightness of upper extremities due to the stimulated effects of rTMS.
- B. Muscle tightness of lower extremities due to the stimulated effects of rTMS.
- C. Both (A) and (B).
- D. None of the above.

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