Equine Therapy and its Effects on Postural Control in Children with Cerebral Palsy.

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Benefits of Equine Therapy in children with CP

- Recent research on the benefits of hippotherapy has found the following:
  - Improvements in posture, motor and head control.\(^2\)
  - Positive effects on gait mechanics.\(^1\)
  - Decreases in internal rotation of the hip.\(^1\)
  - Improvements in psychological and cognitive factors including increased self-esteem, motivation, and attention span.\(^2\)

Limitations to Equine Therapy

- Recent research has also found the following limitations to the use of hippotherapy:
  - gross motor function as measured by the GMFM was not found to be significantly improved.\(^3\)
  - Equine therapy is also very expensive and time consuming for both the therapist and the family involved.\(^3\)

References


Clinical Implications

- Equine therapy appears to be beneficial in improving postural control, decreasing adductor asymmetry, and improve gait mechanics in patients with mild to moderate Cerebral Palsy.\(^1,2,3\)
- While the current evidence is promising, further research must be done in order to support the use of hippotherapy as a effective treatment option.

What is Cerebral Palsy?

- Cerebral Palsy is permanent brain damage that can occur prenatally, perinatally, or post-natally during the first year of birth.\(^1\)
- The disorders of movement, like CP, result directly from the damage to the motor cortex.\(^2\)

What is Equine Therapy?

- Equine therapy, also known as hippotherapy, is an intervention that uses horseback riding to create rhythmic, proprioceptive stimulation, similar to human gait, that forces riders to react and engage core muscles in order to maintain balance.\(^1,2\)

Benefits to equine therapy in regards to postural control

- The rhythmic riding combined with the warmth of the horse is believed to decrease the spasticity in children with spastic CP.\(^2\)
- These benefits have been shown to be maintained for at least 12 weeks post-therapy.\(^3\)