Implementing an Intensive, Short-Duration, Intermittent Physical Therapy Model of Care as a Standard of Practice in a Large, Multi-Site, Outpatient Physical Therapy Department

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Background/Objectives

• Our hospital offered a variety of intensive physical therapy (PT) programs for children with CP; however, the majority of children continued to receive therapy at a low intensity over a long duration of time.

• Intensive, short-duration, intermittent PT programs may improve gross motor skill attainment more than traditional dosing, while also improving parent compliance and satisfaction.

• The objective of this poster is to describe how PT dosing recommendations moved from a low-intensity, long-duration model of care to an intensive, short-duration, intermittent model of care in a large, multi-site, outpatient PT department.

Determining Dosing Parameters

• Physical therapy literature was reviewed to evaluate dosing parameters.

  • Articles reviewed included those which:
    - Evaluated gross motor function using the GMFM in children with CP
    - Compared intensive (≥2 hrs./wk.) to traditional (<2 hrs./wk.) for a maximum duration of 16 weeks
    - Completed therapy in the outpatient, home, or school setting
    - Had more than 1 subject
    - Described dosing in detail

• All except 1 article found a trend or a significant difference between intensive and traditional PT dosing favoring intensive.

  • Ustad et al. 2009 had inconclusive results.

• Total hours of PT were averaged for articles demonstrating a trend or a significant difference favoring intensive PT.¹ ² ³ ⁴

  • Average intensive dosage: 36.4 hours

• The literature investigating the distribution of PT services (continuous vs. intermittent) is inconclusive with regard to its impact on gross motor function.⁵ ⁶ ⁷

• Intermittent PT is:

  • Preferred by parents and they have improved compliance with therapy.⁸ ⁹

  • Allows for motor learning principles to be followed more closely.¹⁰ ¹¹

  • Takes into consideration that children do not develop motor skills at a linear pace.¹² ¹³

Significance

• Intensive PT programs often supplement traditional models of care rather than being the standard of care.

• Treatment parameters vary from a duration of 4-24 weeks, a frequency of 1-2 times per week, and an average number of hours per week of 0.5-2 among 9 PT facilitates.¹²

• This is most consistent with a traditional model of care and does not align with current dosing recommendations in the literature.

• Implementing an intensive-intermittent PT model of care may improve:

  • Gross motor skills,¹³ parent compliance², parent satisfaction³, and more closely match motor learning and pediatric training principles.¹⁰ ¹¹

  • Further research on the impact of dosing within the confines of insurance, scheduling, and individual patient barriers is needed.

References


