Prone Time and its Influence on Motor Development in the Pediatric Patient

Kaitlyn Flak and Ethan Brown

Methods

- 9 articles found, 4 articles used
- Google Scholars and EBSCO Host
  - Prone time and motor development/performance
  - Prone time and developmental milestones
- Subjects
  - Healthy, full and preterm infants
  - 0-18 months
- Alberta Infant Motor Scale
  - Reliable and valid assessment tool

Introduction/Background

- American Academy Pediatrics
  - Back to Sleep Campaign
  - Decreased prone sleeping
  - Lead to decrease in play time prone
- Dynamic Systems Perspective
- Importance of prone time
  - Head, neck, and postural control
  - Development of shoulder girdle stability
  - Shifting and reaching skills
  - Extensor strength

Research Synthesized

- 9 correlation studies found
- 4 correlation studies involving healthy infants used
- Data Collection
  - Parents filled out questionnaire on prone time
  - Trained physical therapists performed AIMS
  - Correlation statistics utilized

PICO Question

- Will babies who receive tummy time daily walk at an earlier age than babies who do not receive daily tummy time?

Results

- Infants exposed to frequent prone time while awake scored higher on AIMS
  - 30 minutes per day in first 6 months of life promotes motor performance
- Infants placed in supine while awake performed lower on AIMS
  - 60+ minutes per day in prone attainment of motor milestones

BELLARMINE UNIVERSITY, LOUISVILLE, KY
Discussion

• Antigravity postural control  WALKING
• Attainment of upright position with UE and core strength  WALKING
• Extensor strength development and head/neck control  WALKING

Areas for Future Research

• Specific play activities in addition to play time position
• Ethnic and geographical diversity
• Long term influence of motor development/specific skill acquisition in later years

References


