CONGENITAL MUSCULAR TORTICOLLIS (CMT)

PRESENTED BY:
Kyle Kelley
Sean Fizer

Introduction/Background

• Idiopathic
• Third most common congenital musculoskeletal anomaly in infants (0.4 – 2.0%)\textsuperscript{4}
• Results from a shortening or contracture of the sternocleidomastoid muscle
  – Head tilted to one side and rotated to the opposite side

• Breech birth and first born children more common\textsuperscript{4}
• High rate of hip dysplasia and increased risk of developmental plagiocephaly also seen in children with CMT\textsuperscript{2,4}

PICO Question

• When is it appropriate for an infant with CMT to undergo a physical therapy program versus a home-based program for improvements in cervical range of motion and head control?

Research Synthesized

• Articles chosen
  – Relevance to PICO question
  – Current literature
  – Level of evidence

• Systematic Review (2)
• Randomized Pilot Study (1)
• RCT (1)

Methods

• EBSCO Host
• Databases
  – CINAHL, MEDLINE, SPORTDiscus
• Terms used
  – Torticollis and Treatment (1,193 articles found)
  – Torticollis and Physical Therapy (199 articles found)
Results

- Manual stretching
  - Safe and effective when seen before 1st year
- Improvements seen 2 months quicker when seen by experienced PT
  - Limitations due to small sample size

Areas for Future Research

- Most effective type, frequency, or duration of stretching of SCM
  - Stretching recommendations were based on healthy adult and pediatric muscle tissue
- Research to evaluate the most effective treatment frequencies would significantly contribute to CMT literature
- Strengthening of opposite SCM as part of treatment plan has not been studied

Discussion

- 3 Prognostic Factors to direct decision making
  - PROM, fibrotic mass, and age of onset of treatment
- What to address if PT is needed
  - PROM
  - AROM
  - Development of symmetrical movement
  - Environmental adaptations
  - Parent/caregiver education

Questions??

References