

Referring for Treatment of Congenital Muscular Torticollis

Why Physical Therapy?

- Öhman et al found that infants with PT treatment increased symmetry of movement 2 months sooner than infants receiving stretching from parents alone.¹
- Three studies (Celayir; Emery; and Cameron and Cameron) found excellent results or full resolution in 65% to 99% of infants involved.¹
- Öhman reports KinesioTape significantly increased Muscle Function Scale scores in patients with CMT.¹
- Chon et al reports Mokinetic stretching significantly decreases SCM thickness and increases cervical rotation.¹
- Karmel-Ross reports that infants 4 to 4.5 mos of age using at Tubular Orthosis for Torticollis (TOT) collar obtain 4.7° closer to vertical head posture than those infants who did not.¹



Long Term Effects

- Schertz et al report infants with CMT are at higher risk for gross motor developmental delay.¹
- May lead to visual tracking deficits, nystagmus, vestibular deficits, or scoliosis when left untreated.
- Yu et al found that craniofacial deformities increased in severity with increased age in patients with uncorrected CMT.²
- Deformities include plagiocephaly, posterior displacement of the ipsilateral ear, and mandibular deviation among others.^{2,3}

At MOSAIC we utilize many different treatment strategies in Physical Therapy

- Stretching program under the guidance of a physical therapist
- Positioning program to promote craniofacial symmetry
- Manual therapy
 - Myofascial release
 - Positional release
- Direct strengthening to contralateral SCM
- KinesioTape Method to surrounding musculature
- External orthotics including TOT collar or shaping helmet

References:

1. Kaplan SL, Coulter C, Fetters L. Physical Therapy management of congenital muscular torticollis: an evidence-based clinical practice guideline. *Pediatric Physical Therapy*. 2013;25(4):348-394. Doi:10.1097/PEP.0b013e3182a778d2
2. Yu C, Wong F, Lo L, Chen Y. Craniofacial deformity in patients with uncorrected congenital muscular torticollis: an assessment from three-dimensional computed tomography imaging. *Plastic and Reconstructive Surgery*. 2004; 11(1):24-33. Doi:10.1097/01.PRS.0000096703.91122.69
3. Freed SS, Coulter-O'Berry C. Identification and treatment of congenital muscular torticollis in infants. *Journal of Prosthetics and Orthotics*. 2004; 16(4S): 18-25. http://www.oandp.org/jpo/library/2004_04S_018.asp. (Accessed: October 16, 2014).