What is Congenital Muscular Torticollis?

- Shortening of the Sternocleidomastoid muscle in an infant
- Typically tilted toward the side of SCM and rotated away
- Also called twisted neck
- Common causes include: intrauterine malposition, birth trauma, position post birth
- Common treatments include: passive stretching, exercises, position changes
- Infant has problems tilting away and rotating towards the side of impaired SCM
- The incidence of torticollis is rather common and reported occurring as high as 1 in every 250 live births (2)
- Difficult birth history is reported in 30–60% of torticollis patients (2)

Impairments that need to be addressed with Stretching

- Limited neck motion
- Decreased reaching with opposite hand
- Trunk shortened on side affected

Clinical Relevance

- Congenital Muscular Torticollis is more common disorder now likely due to various positioning
- Physical Therapist need to use appropriate stretching techniques to help gain best outcomes
- Repetitive stretching of the sternocleidomastoid muscle will desensitize the child to a new and improved position and appears to actually lengthen the muscle itself. (1)
- Combination of active participation and passive stretching have been shown to decrease overall impairments (3,4,5)

Stretch Protocol

- Manual stretching was performed three times a week by a properly trained and experienced physiotherapist who used a standardized program (4)
- Three repetitions of fifteen manual stretches of the tight muscle with a gentle force sustained for one second and a rest period of ten seconds in between
- Parents can and will be taught an appropriate stretch protocol, be careful not to make child fearful of individuals touching their head

Evidence

- Manual stretching is safe and effective in the treatment of congenital muscular torticollis when a patient is seen before the age of one (4)
- The most important factors that predict the outcome of manual stretching are the clinical group, the initial deficit in rotation of the neck, and the age of the patient at presentation (4)
- Exercise protocol consists of three components of neck stretching: anterior flexion—extension of the neck, lateral flexion to right—left sides and rotation of the neck to right—left sides (5)
- Repetitive stretching of the sternocleidomastoid muscle will desensitize the child to a new and improved position and appears to actually lengthen the muscle itself (1)
- Parents can be taught how to appropriately stretch their child, but better results have been shown with trained professionals
- Combining active and passive stretching can be utilized to address patients problems

References