Congenital Muscular Torticollis Treatment Handout

Congenital muscular torticollis, or congenital torticollis, is a condition where a newborn's neck muscles cause their head to tilt and twist abnormally due to the shortening of the sternocleidomastoid muscle. This muscle runs along the side of the infant's head and neck. The condition is often linked to the baby's position in the womb or birth-related trauma.



Causes

Congenital muscular torticollis primarily results from the shortening or tightness of the sternocleidomastoid muscle, affecting neck movement and rotation. It may be caused by abnormal womb positioning, delivery stress, birth trauma, or genetic factors.

Symptoms

Symptoms usually appear soon after birth, including:

- Neck tilting to one side, causing the head to turn in the opposite direction.
- Limited head movement, making it difficult to turn the head fully.
- A small, soft lump in the affected neck muscle, indicating swelling or fibrosis.
- Persistent head tilt or twist, leading to asymmetry.

Treatments

Treatment for congenital muscular torticollis aims to enhance neck mobility and correct the child's head tilt using a combination of non-surgical and, when necessary, surgical methods.

Early diagnosis and intervention are crucial for successful treatment.

Non-surgical treatments

- **Stretching exercises:** Simple stretches prescribed by a physical therapist can help loosen the tightness in the affected muscle, improve mobility, and reduce discomfort. These exercises may include gentle massage and stretching techniques, such as passive range of motion movements.
- **Repositioning techniques:** Certain changes in daily activities, like changing where the baby sleeps or plays, can ease pressure on the affected muscle. Placing toys or objects on the side to which your child naturally turns their head can also encourage them to use both sides of their neck.
- Orthotic Devices: Specialized collars or braces may be utilized to maintain proper head alignment while stretching and strengthening the neck muscles. The tubular orthosis for torticollis (TOT) collar is recommended for children over four months old. It supports the affected side of the neck in a neutral position and can be worn during the day while the child is awake.
- **Physical therapy:** Regular physical therapy sessions may be recommended to work on strength, flexibility, and range of motion in the neck muscle.

Surgical treatments

Surgical intervention may be recommended in cases where there is no improvement after six months of manual stretching, particularly if passive rotation and lateral bending exceed 15 degrees or if a tight muscular band is present in the sternocleidomastoid muscle.

Surgical options may include unipolar or bipolar lengthening of the sternocleidomastoid muscle, "Z" lengthening, or radical resection of the muscle.

Surgical management has shown positive outcomes in patients with long-standing untreated torticollis, leading to improved head position and enhanced cervical range of motion. However, it is important to note that facial asymmetry typically remains unchanged following surgery.

Additionally, a prospective study has indicated significant improvements in health-related quality of life and clinical outcomes after surgical treatment for congenital torticollis.

References

Gundrathi, J., Cunha, B., & Mendez, M. D. (2021). *Congenital torticollis*. PubMed; StatPearls Publishing. <u>https://www.ncbi.nlm.nih.gov/books/NBK549778/</u>

Ortholnfo. (n.d.). *Torticollis (twisted neck)*. American Academy of Orthopaedic Surgeons. <u>https://orthoinfo.aaos.org/en/diseases--conditions/congenital-muscular-torticollis-twisted-neck</u>