

TORTICOLLIS

WHAT IS TORTICOLLIS?

The term *torticollis* is used to describe the tilting of an infant's head to one side with rotation to the opposite side.

DIFFERENT TYPES OF TORTICOLLIS:

The first system that may create this torticollis posture is the:

Visual System: Our body is guided by a naturally occurring line that splits our bodies down the middle (producing symmetrical, opposing sides) and a line that runs horizontally through the center of our eyes. The point at which the lines intersect, is our reference point. With a visual asymmetry, our head will alter its position to resume that horizontal line of orientation. Ophthalmologic treatment cures the torticollis in this case

Neurologic System: Any abnormal tissue, such as a tumor or alteration such as insufficient blood flow that occurs in the Central Nervous System.

Muscular System: Which holds our skeleton together and functions as our “push & pull system”. When this connective material is out of balance it can distort our alignment. This can happen prior to or at birth (congenital) or be caused by TRAUMA during delivery (breech, shoulder dystocia – when the shoulders get stuck in the birth canal) or it can be POSITIONAL due to a persistent preference of the head’s location.

3 Types of Congenital Muscular Torticollis

- 1) Sternocleidomastoid Tumor
- 2) Muscular
- 3) Postural

Orthopedic System: bony and spinal deformities can cause mal-alignment, for example spinal tumors, poorly formed or fused spinal vertebra

GI System: Gastro-esophageal reflux can be present and positional adjustment is used for pain relief, treatment is medication

HOW TO SCREEN FOR TORTICOLLIS?

If you notice any of the following, refer the baby to a member of your early intervention team who has the most knowledge and expertise in motor development and torticollis:

1. Does the baby prefer to turn his head to one side over the other?
2. When looking at the baby's pictures, does her head always seem tilted to one side?
3. Is there flattening on the back or side of the baby's head?
4. Does the baby prefer to nurse on one side?

TORTICOLLIS

ASSOCIATED CONDITIONS:

- 1) Hip Dysplasia (___%)
- 2) Reflux
- 3) Atypical Delivery: breech position or use of forceps
- 4) Plagiocephaly (___ %)
- 5) Craniofacial Asymmetry (___ %)

RED FLAGS

- 1) Head tilt to the same side that the face looking or the head tilt alternating sides
- 2) Abnormal muscle tone with asymmetrical head and neck postures
- 3) Late onset (older than months of age)
- 4) Visual abnormalities
- 5) Sudden onset

TREATMENTS:

- 1) Positioning:

- 2) Active strengthening:

- 3) Active and passive range of motion:

ALTERNATIVE TREATMENTS:

- **Orthotic Intervention: Tubular Orthosis for Torticollis (TOT Collar)** - Now you can buy these right off of the internet. (\$55 -\$90)
 - Consider when baby has persistent head tilt $>5^\circ$, but full passive range of motion
 - Now you can buy these right off of the internet (\$55 -\$90):
<http://www.alimed.com/torticollis-tot-collar.html?CAWELAID=400004100000003332&gclid=CL6BIJvA0rkCFU-Z4AodQT4ASw>
- **Surgery:**
 - older than 12 months of age
 - severe cosmetic concerns
 - significant ROM limitation

WHAT CAN BE DONE AT HOME?

1. Carry the baby
2. Position the baby, positioning activities within the home and positioning yourself
3. More tummy time
4. Encourage baby to use both hands and both legs during play
5. Encourage baby to look to both sides
6. Alternate which side the baby is fed from (especially when taking a bottle or breast fed)

TORTICOLLIS

REFERENCES:

- Burch C, Hudson P, Reder R, Ritchey M, Strenk M, Woosley M. Cincinnati Children's Hospital Medical Center: Evidence-based clinical care guideline for Therapy Management of Congenital Muscular Torticollis. <http://www.cincinnatichildrens.org/svc/alpha/h/healthpolicy/ev-based/otpt.htm>, Guideline 33, pages 1-13, 11-19-09.
- Miller L, Johnson A, Duggan L, Behm M. (2011). Consequences of the "Back to Sleep" Program in Infants. *J of Ped Nursing*, 26(4):364-368.
- Oledzka M. Clinical Approach to the Evaluation and Treatment of Congenital Muscular Torticollis. April 2012, Virginia Beach.
- <http://www.heyoubaby.com/health-safety/nightform-infant-positioning-bed-mattress-bed-baby-pink.html>

IMAGES:

- Image from the online Fairview Health Library <http://www.fairview.org/healthlibrary/Article/89054>)
- Image from Diapers Rub Bub blog <http://diapersrubbub.wordpress.com/2013/05/01/>
- Images from Yahoo Voices - SIDS Back to Sleep Campaign <http://voices.yahoo.com/sids-back-sleep-campaign-causes-increased-rates-6759542.html>
- Image from KinderBand <http://kinderband.net/plagiocephaly/scaphocephaly/>
- Image from MOTHERING - The Home for Natural Family Living <http://www.mothering.com/community/t/1351120/torticollis>
- Image from TheCooper Family blog <http://nickandjennifercooper.blogspot.com/2010/11/torticollis.html>
- Image from The Playdate Magazine <http://www.playdateyakima.com/category/health/second-opinion>
- Image from Quizlet <http://quizlet.com/9039883/orthognathicosacraniofacial-flash-cards>
- Image from PlagioCraddle <http://www.plagioprevention.com/Support-Information-for-Parents/What-is-Plagiocephaly>
- Image from Working On/Working Mom blog <http://www.workingonworkingmom.com/plagiocephaly>
- Image from EARLYstart Pediatric Physical Therapy Inc. http://www.earlystartpt.com/head_neck_asymmetry.html