What is torticollis?
Torticollis is an abnormal position of the head and neck and is common in infants.

What causes torticollis?
Torticollis may be caused by tightness in the muscle on one side of the neck (this muscle is called the sternocleidomastoid). Sometimes there is a thickening or lump in the affected muscle, called fibromatosis coli. This is called “Congenital Muscular Torticollis”. There may be tightness in other neck or shoulder muscles as well.

Torticollis can also be caused by soft tissue or bony abnormalities, vision problems or trauma. This is called “Acquired Torticollis”. Sometimes it may be the result of the baby’s position when sleeping on their back. This is called “Positional Torticollis”.

It is important to work with your doctor to find out the cause of your baby’s torticollis. Your doctor will look at your baby’s head movement and may also take an X-ray or other imaging study of your baby’s neck or an ultrasound of a lump in the muscle.

What are the signs of torticollis?

Your baby will prefer to turn their head to one side:
Your baby will have problems turning their head from side to side and will often keep their head turned only to one preferred side. As your baby gets
older, they may be able to look straight ahead, but have problems turning their head to the other side.

**Your baby may tilt their head to one side:**
Your baby may hold their head tilted to one side with one ear closer to their shoulder. You may see this most when your baby is in a car seat or in photos.

**Your baby’s head may be misshaped:**
Your baby may have a flattening or bulging on the back or side of the head. This is called plagiocephaly. You may notice one ear is forward of the other ear. Muscle tightness may also change the shape of your baby’s facial features on one side of the face. For example, their cheek may appear fuller on one side, or their eye may be “more open” in appearance compared to the other side. Your baby may open their mouth with an uneven jaw.

**Behavior:**
Your baby may become fussy when you try to change the position of their head or when they are put on their tummy because they are not able to lift or turn their head.

**How is torticollis treated?**
The affected muscle in your baby’s neck may be shortened, tight and strong, the muscles on the other side of their neck may be stretched and weak.
Our goals are to help you position your baby in midline, stretch the tight neck muscles and strengthen the weaker neck muscles.
Three main things influence good outcomes in babies with torticollis:
These are:
• How severe the torticollis is
• How old your baby is when you start treatment
• How well you follow through on your home exercise program

**What can I do to help treat my baby’s torticollis?**
Torticollis is treated through exercises that you do at home with your baby. A good way to work on the exercises is do a different one with each diaper change. That way you are working on them throughout your day. There are 4 main areas that you will work on with your baby. They are:
• Positioning
• Stretching
• Strengthening
• Motor development
Positioning Exercises

You can start right away by helping position your baby’s head, neck and trunk in a more neutral position. You will also do activities to help promote them turning their head to their non-preferred side.

Positioning tips

• Look at your baby’s head position throughout the day. Your baby prefers to turn to their: **Right  Left**
• Help your baby to keep their head in a straight position that is in line with their body (this is called “mid-line”).
• Move items of interest and change your baby’s position to promote them turning their head toward their **Right  Left**.

Positioning for birth to 3 months

1. **In the car seat, swing or bouncy seat**

• Place firmly rolled thin blankets or towels along your baby’s sides.
• The towel rolls should support the sides of your baby’s body and head.
• Do not place the roll behind your baby or inside the harness in the car seat.
• This can also be done when your baby is playing on their back to keep their head in midline.
2. **Position your baby’s head to their non-preferred side**

- When carrying your baby in a wrap, carrier or at your shoulder, position their head to their non-preferred side **Right Left**.
- This takes pressure off their head to prevent more flattening of the skull.
- Place your baby so they will turn to their non-preferred side to look at you when you put them in the crib or during diaper changes.
- Put toys, mobiles and other interesting objects to the non-preferred side of the crib or changing table.

3. **Positioning for play time**

- Put your baby lying on either side for play time.
- You may need to put a rolled towel behind them to keep them from rolling onto their back.
- You can also place a small folded washcloth under your baby’s head to keep their head and neck in line with their trunk.

4. **Positioning for feeding**

- When feeding your baby, notice the position of their head, neck and trunk. Try to hold your baby so that their head and body is in a straight position or the head is turned to their **Right Left**.
• Help your baby to turn their head by using the rooting reflex. Before feeding, stroke the side of your baby’s Right Left cheek to promote head turning or rooting.

• Repeat this 3 to 4 times before feeding your baby. Do this when you offer a pacifier as well.

• If your baby is having trouble latching to breast or bottle due to an uneven jaw, talk to your therapist for ideas to help improve their latch.

**Positioning for 3 to 6 months**

• As your baby gets older, they should spend as much time as possible lying on their tummy.

  Place a rolled towel under the arm pits.

• Use a Boppy type pillow, rolled towel or foam wedge if it is still hard for your baby to lift their head. This helps them tolerate this position longer.

• Keep putting your baby’s crib, infant seat, swing, or bouncy chair in the room so your baby needs to turn their head to their Right Left to watch you and other family members.

• When your baby can sit with support at the waist (or trunk), use a Boppy type pillow, high chair, or hook-on table chair for short periods of time.

• Use towel rolls along the side of your baby’s legs and body for extra support when they are in supporting sitting.

• Exersaucers and stationary jumpers should be used only in moderation and with supervision. Do not use walkers with wheels.

• Sitting upright and spending time off of their back takes the pressure off your baby’s head and helps it to become more round.

**Positioning for 6 to 12 months**

• As your baby becomes more active and mobile, be sure they spend time on the floor playing while sitting or lying on their tummy.

• Support your baby in sitting if needed.

• When your baby is on the floor, continue to place toys or family activity on their Right Left side.
Stretching Exercises

Passive range of motion (gentle stretches) may help your baby achieve full neck motion. You can start doing these stretches right away.

Stretching tips

• Work gently within your baby’s tolerance. Slowly increase the motion over time.
• Find the position and time of day that works best for your baby.
• Hold these gentle stretches for about 30 seconds. Stop the stretch sooner if your baby starts to resist the motion or becomes fussy.
• You should never feel like you are forcing the motion.
• You can hold the stretch up to 1 minute if your baby is very relaxed.
• Use your voice or favorite toys to distract and soothe your baby.
• Repeat these stretches often during the day: during playtime, after bath and or at each diaper change.

1. Neck rotation stretch:

• Place your baby on their back.
• With one hand, gently hold their Right Left shoulder against the surface.
• Place your open palm gently on your baby’s cheek. Slowly help your baby turn their head to their Right Left side.
• You can also work on this by rolling your baby’s body to their Right Left side, gently holding their cheek with one hand and allowing their shoulder to roll back to the surface.

You can also do these stretches with your baby on your tummy, lap and propped on your legs.
2. ☐ Neck rotation stretch on tummy:
Place your baby on their stomach, gently guide and turn their head to their Right  Left  side.

3. ☐ Neck rotation stretch sitting on your lap:
Hold your baby on your lap. Encourage them to look to their non-preferred side. Gently hold their Right  Left  shoulder and guide their head to their Right  Left  side.

4. ☐ Neck rotation stretch propped on your legs:
With one hand gently hold their Right  Left  shoulder against the surface of your lap. Place your open palm gently on your baby’s cheek. Slowly help your baby turn their head to their Right  Left  side.
5. □ **Lateral head tilt stretch:**

- Place your baby on their back.
- Use one hand to gently hold your baby’s **Right** shoulder against the surface.
- Place your other hand under your baby’s head.
- Slowly bring their **Right** ear towards their **Right** shoulder.
- You can try this alternate hand position:

Some babies become fussy with this exercise after a while. You can do also the exercise in these positions:

- Side lying on your lap
- Being held in “side Superman” position
- Using a Boppy type pillow
6. **Side Superman stretch**

- For side Superman, place your baby across your body in side lying with tight side **Right** **Left** down
- Use one arm to come through your baby’s legs so the inside of your elbow is to their diaper.
- Use your hand to hold your baby’s shoulder. Using your other arm, come across the chest and use inside of the elbow to lift their **Right** **Left** ear toward shoulder.

Your therapist may recommend other stretching activities such as trunk rotation or upper extremity movements.

### Strengthening Exercises

As your baby gains head control you can begin to strengthen their weaker side neck muscles. One way you can do this is to use a “head righting reaction”. This is when you place your baby in certain positions so they use their muscles to lift their head against gravity. This strengthens the muscles.

1. **Lateral neck flexion**

- At 3 to 4 months of age, start to carry your baby slightly tilted to their **Right** **Left** side. This causes them to lift their head up to midline to strengthen the neck muscles.
• As your baby’s neck and trunk strength improves, you can hold them on your leg and start to tilt them to the side. This also helps them strengthen muscles by bringing their head towards midline.

• Sit your baby on your lap facing either away from or towards you. Slowly lean or tilt their body to their Right Left side. This will encourage them to lift their head to their Right Left side.

• While your baby is sitting on your knee, have them look to their Right Left side and tilt them slightly backward.
As your baby starts sitting with good control you can start to do these exercises in a variety of fun ways such as up in the air or on a therapy ball. Singing songs and making funny faces helps make exercises fun. You can also elicit head righting on the ball when your baby is on their tummy or sitting.

**Exercises for Motor Development**

As your baby grows we want to help them develop a balance of strength and movement. We can use motor skills to help strengthen their neck muscles and encourage them to use both arms and legs equally, move to both sides and develop good motor patterns.

1. **Visual tracking exercise**

   Encourage your baby to turn their head using your face or toys and rattles.

   - Place your baby on their back and show them a favorite toy. Slowly move the toy towards their **Right Left** shoulder. If your baby loses focus, bring the toy back to the center and repeat many times.
   - Also do this activity when your baby is on their tummy or sitting.
   - When your baby is sitting, hold their **Right Left** shoulder so that just their head turns rather than their whole body. You may need to move the toy behind their shoulder to promote full head rotation.

2. **Rolling exercise**

   - When your baby is 3 to 4 months old, roll them onto their **Right Left** side before picking them up from the crib or changing table.
   - Once they are lying on their side, place one hand under their hips and one hand under their head/shoulder and slowly lift them up. Encourage your baby to lift their head up from the surface as you complete the lift.
3. Assisted rolling exercise

- Help your baby to roll from back to tummy. Place your hand on their Right Left hip, bend their leg at hip and knee and slowly start to roll your baby to their Right Left side. As your baby reaches their side, give a slight pulling pressure on the hip towards the feet.
- Wait for your baby to lift their head up off the surface.
- Slowly continue the roll onto the tummy.
- Repeat this rolling motion from tummy to back, gently “tuck” their arm and help them start the roll, stopping for a brief moment while they are on their side.

4. Side sitting and sitting

- Place your baby in a side sitting position with weight on their Right Left arm or elbow and their feet to their Right Left.
- Encourage your baby to reach for toys with their free arm. Put one hand on their supporting arm and your other hand on their opposite hip. This will cause them to lift their head to midline.
Torticollis and Your Baby

Mobility
As your baby becomes mobile they will begin to crawl, pull to stand and move from sitting to their stomach, side lying to sit and sit to stand. Watch how your baby moves and encourage them to move to both sides, use either leg to kneel or either arm to reach for toys.

If they tend to use one leg to pull to stand, help them practice with the other leg. When your baby comes to kneeling, hold at the hips and shift their weight to their Right Left and help them bring the other leg forward into a half kneel.

When can I stop working with my baby?
By doing these exercises daily and putting them into your baby’s routine, you should help your baby’s torticollis resolve. Many babies are much better by 10 to 12 months of age. Most of the time babies have full passive (you help them move) range of motion before they have full active range of motion on their own. Once your baby appears to have normal head movement and position, you may still see their head tilt when they are tired, ill, teething, eating or when they are learning a new skill such as sitting, crawling or walking.

Your physical or occupational therapist will help you to decide when to stop doing the activities. Talk with your doctor if you have any concerns about your baby’s torticollis, head shape or development.

If you have questions contact your child’s therapist:

To Learn More
• Occupational & Physical Therapy 206-987-2113
• Ask your child’s healthcare provider
• www.seattlechildrens.org

Free Interpreter Services
• In the hospital, ask your child’s nurse.
• From outside the hospital, call the toll-free Family Interpreting Line 1-866-583-1527. Tell the interpreter the name or extension you need.

Seattle Children’s offers interpreter services for Deaf, hard of hearing or non-English speaking patients, family members and legal representatives free of charge. Seattle Children’s will make this information available in alternate formats upon request. Call the Family Resource Center at 206-987-2201.

This handout has been reviewed by clinical staff at Seattle Children’s. However, your child’s needs are unique. Before you act or rely upon this information, please talk with your child’s healthcare provider.

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