

Torticollis

Assessment

Postural Assessment

- Include a full postural assessment checking for any other postural dysfunctions such as scoliosis.
- With a typical torticollis posture there is a cervical scoliosis convex to the unaffected side...with a left torticollis, the neck sidebends to the left, the face rotates to the right, the left shoulder is elevated and there is a right cervical scoliosis.
- the apex is usually at C4.
- The neck may also be in extension or flexion with acute acquired torticollis
- There are often facial bone asymmetries with congenital torticollis. The maxilla, zygoma and temporal bones on the affected side are more posterior, making the eye on the affected side appear more recessed.
- The mandible may deviate to the affected side.

Palpation

- of an acutely spasmodic muscle may reveal heat, point tenderness, firmness and increased tone.
- A contracted muscle may be tender and feel cool due to ischemia, and be hard and fibrous.

Testing

- AF and PR ROM on the neck, thorax, and shoulder are performed for **all types of torticollis**
- With **acute acquired torticollis** and **spasmodic torticollis**, active free movement is painful and very restricted when attempting to take the neck and head out of the torticollis position.
- passive relaxed movement away from the affected side is restricted with a muscle spasm end feel
- with **congenital torticollis**, active free movement away from the affected side is very restricted
- Passive relaxed movement away from the affected side is very restricted with a leathery end feel.
- AR strength testing with acquired torticollis, performed once the spasm has reduced, or with congenital torticollis may reveal weakness of the contralateral anterior and anterolateral neck muscles, as well as the ipsilateral posterolateral neck extensors.

Special Tests

- compression and cervical distraction tests are used to differentiate a cervical nerve root compression that may underlie and acute acquired torticollis
- the vertebral artery test rules out cerebral vascular insufficiencies once the spasm has reduced
- Spurlings test performed after the spasm has reduced may also indicate facet joint irritation.

Massage for all Torticollis

- Positioning is supine
- Cold hydrotherapy is used for analgesic effect , while heat is used with trigger points to increase local circulation and flush out metabolites.
- Deep diaphragmatic breathing is an important part of this treatment, decreasing sympathetic nervous system firing and spasm.
- The treatment goals are to decrease pain, spasm and abnormal positioning. Due to the painful nature of this condition it is important that the therapist gain the clients trust. They must realize the treatment itself will not be painful
- The clients head must be well stabilized during the massage so they are not worried about uncontrolled movement causing more pain.

Massage for Acute Acquired Torticollis

- Treatment begins on the unaffected side. While supporting the clients head on the affected side with one hand, the therapist uses slow, gentle effleurage and petrissage to the anterior and posterolateral muscles on the unaffected side.
- Then move to the side in spasm
- Direct pressure techniques may be too painful
- Golgi tendon release and origin and insertion technique are used.
- Agonist contraction by the client can be used.
- All techniques should be pain free.
- Agonist contraction for the sternocleidomastoid muscle involves contraction in two different directions. side bending one way and rotation in the opposite direction
- Ex. With a left sided torticollis, the client isometrically and submaximally resists side bending to the right. As the spasm diminishes, the therapist passively moves the head a bit out of left side bending, stopping if there is pain or restriction. Repeat. Then the rotation component is addressed as the client isometrically and submaximally resists rotation to the left. The head is again gradually moved out of right rotation
- Golgi tendon organ release and the origin insertion technique are performed on the sternal. Clavicular and mastoid attachments of sternocleidomastoid
- Several applications of the same technique or a combination of different techniques may be necessary to reduce the spasm.
- Work surrounding tissue and synergists to scm
- Return to the spasm
- Work to the side not in spasm, including splenius cervicis, splenius capitus, multifidi, rotators and suboccipital muscles, is also interspersed with work to the affected side.
- As the spasm of scm diminishes and disappears, scalenes, upper traps and levator on the affected side are treated in a similar manner.
- It may be hard to reach scalenes until the torticollis is significantly reduced. In this case agonist contraction is indicated. Ex. The client isometrically and submaximally resists neck side bending to the right to inhibit left middle scalene, neck side bending to the right followed by head rotation to the left to inhibit left anterior scalene and side bending to the right followed by rotation to the right to inhibit left posterior scalene.
- Once the spasm has decreased or is less painful for on-site work, gentle direct technique such as vibrations, stroking, fingertip kneading and light muscle stripping are used on affected muscles.
- Trigger points in scm
- All other muscles in the neck are assessed for trigger points and hypertonicity

- Strokes that increase local circulation to flush out metabolites
- Pain free passive relaxed range of motion of the neck
- Once the head and neck are in neutral position, Golgi tendon release for the suboccipitals and long-axis traction on the occiput are employed
- Joint play to any hypomobile cervical vertebrae is applied in a pain free manner.
- The therapist must significantly decrease the tone in the acutely spasmodic muscles before applying a slow passive stretch to any affected muscles following trigger point treatment.
- To fully stretch sternocleidomastoid, the clients neck must go into extension
- If the client is unwilling to put the neck into extension the therapist can use PIR, a less aggressive technique, perform partial stretches that do not go into extension, perform stretches in subsequent treatments or give them for self care.
- In all of the following stretches the shoulder on the affected side is stabilized.
- To stretch the clavicular head of the sternocleidomastoid, the clients head is rotated away from the side to be stretched and the clavicle is stabilized
- To stretch the sternal head of the sternocleidomastoid, the head is rotated towards the affected side and the chin is tucked in to the shoulder, elevating the mastoid process. The stretch is held for only a few seconds. If the client feels dizzy, the head is returned to neutral immediatly.
- To stretch middle scalene, the neck is side bent to the unaffected side with the clients head in the neutral position.
- To stretch anterior scalene, the neck is side bent to the unaffected side and the head is rotated to the affected side.
- To stretch posterior scalene, the neck is side bent to the unaffected side and the head is rotated to the unaffected side.
- Upper trapezius and levator scapulae are also stretched
- The treatment is finished with soothing stroking and petrissage to the muscles of mastication, the forehead and the scalp

Massage for Congenital Torticollis

- Consent to treatment is required by parents for an infant or child
- The goals of treatment are to lengthen the contracted structures, reduce the abnormal positioning, restore range of motion of the head and neck, strengthen any weak structures and is necessary educate the parents regarding self care.
- Initially gentle fascial stretching is applied to the affected sternocleidomastoid in a segmental fashion. Lighter pressure is used with infants, slightly more pressure may be tolerated by children
- The therapist stabilizes the fascia over the clavicle with the fingers of one hand. The fingers of the other hand grasp the sternocleidomastoid muscle in a pincer grasp one centimeter away from the clavicle. A fascial spread is applied to the tissue. This is repeated segmentally along sternocleidomastoid
- Fascial spreading is also used on the scalenes, pectoral fascia, upper trap and levator
- Gentle stretching is used on the affected muscles, with the long-term goal being to reposition the head in the opposite torticollis position just for the purpose of the stretch. Same stretches as Acute just less pressure is used.

Massage for Spasmodic Torticollis

- Treatment goals are to reduce sympathetic nervous system firing and spasm. To normalize head position, restore range of motion and to educate the client on preventative techniques and spasm control
- Main focus is a full body relaxation massage. Soothing and gentle. Compensatory structures are worked, as well as the diaphragm, intercostals and pectorals.
- Direct massage on the neck is contraindicated as this may make the acutely spasmodic muscle worse
- Submaximal isometric agonistic contraction is used
- In subsequent treatments, gentle cervical traction and work to correct scoliotic curves may be helpful. Positive results may occur within six months to one year.