

Acquired Torticollis

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Torticollis, sometimes called wryneck, refers to an abnormal position of the head and neck, where the head is laterally tilted, with the chin rotated to the opposite side. These positional changes of the head are physical findings and do not immediately suggest the diagnosis of the cause of this condition. The head position is characteristic of the action of the sternocleidomastoid muscle (SCM) and suggests that contraction or shortening of that muscle is involved.

Chiropractors have been treating patients with torticollis for many years, with considerable anecdotal success. The area of treatment is generally the upper cervical spine. Recent publications in the field of pediatric medicine are finally giving credit to subluxation of the upper cervical spine as a cause of acquired torticollis.¹

Congenital Torticollis

Newborn infants can develop torticollis due to fibrotic muscular adhesions in the SCM. These positional changes of the head are occasionally seen at birth but frequently are not observed until two to four weeks of age. Newborn torticollis can be due to a fibrotic mass in the SCM, causing shortening of the muscle. This mass will usually be palpable and be about one to three centimeters in diameter, and is thought to be due, in part, to trauma to the soft tissues of the neck during delivery. The mass usually resolves within four to six months.

Other causes of congenital torticollis include trauma to the atlanto-occipital or atlanto-axial articulations or may be due to congenital anomalies of the cervical spine, such as hemivertebra. If a mass cannot be palpated in the SCM, then cervical x-rays should be obtained to more accurately identify the cause of the problem.

Acquired Torticollis

Most cases of torticollis in older children have a sudden onset and may follow strenuous activity, mild trauma or sudden change in neck position. Significant spasm of the SCM can be seen and tenderness can be elicited in the body of the muscle and in the area of the synovial articulations on the uninvolved side. X-rays will indicate a significant scoliosis in the mid-cervical region, which may account for the irritation of the ligamentous structures on the convex side of the spine.

Encouraging signs of further acceptance of the chiropractic model of spinal subluxation as producing muscular and ligamentous problems are evidenced by the following extract from the latest edition of the medical text, *Primary Pediatric Care*, by R.A. Hoekelman.¹

"Sudden difficulty in rotating the head to one side, accompanied by torticollis and muscle spasm, may occur as a result of rotational subluxation of the atlas (C1) on the axis (C2) or C2 on C3."

Other causes of torticollis can include intervertebral disc calcification, retropharyngeal infections, osteomyelitis of the cervical vertebrae, drug reactions, spinal tumors, atlanto-axial instability as seen in Morquio's and Down's syndromes. The use of roentgenographic studies supported by bone scanning technology will usually be adequate to identify if any of the above conditions is implicated in the etiology of a case of acquired torticollis.

Management

Treatment of torticollis, as with any disorder, depends on accurately diagnosing the true cause of the condition first.

Newborn infants with torticollis accompanied by a mass in the contracted SCM should undergo a treatment regimen of passive stretching exercises to the involved SCM muscle. This protocol is reported to be almost always successful if started before the age of one year.

Newborn infants without a detectable SCM mass and without x-ray evidence of congenital anomalies of the spine, should be evaluated for rotary subluxation of the upper cervical vertebrae. If cervical subluxation is involved, then gentle cervical traction should be followed by an appropriate specific spinal adjusting technique.

In older children with acquired torticollis resulting from vertebral subluxation, with associated muscular and ligamentous involvement, a soft collar may help to provide support and to keep the involved muscles warm, especially in colder climates. Gentle traction of the neck with specific cervical adjustments to the involved spinal segments is usually effective in 3-4 days.

Reference

1. Rosenstein BJ: Torticollis. In Hoekelman RA, editor: Primary Pediatric Care, ed 2, St. Louis, Moseby, 1992.

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