



Chiropractic From Head to Toe: Upper Back Pain

Although injuries to the upper back (thoracic spine) are not as common as lower back or neck injuries, there are still a number of conditions and factors that can contribute to pain and discomfort in this area. Thankfully, your chiropractor knows how to ease your pain!

The thoracic spine is that area of your back where the ribs are attached—also called your upper back. Because of its location, the upper back and ribcage are designed to be more stable, creating a protective "cage" for many of your vital organs—like the heart, lungs, liver, stomach and spleen.

Since the thoracic vertebrae do not have the same range of motion as the cervical or lumbar vertebrae, it is rare for someone to experience a disc herniation in this area.¹ In fact, only about 1-3% of all disc herniations occur in the thoracic spine.² Even when present, thoracic disc herniations do not necessarily cause symptoms in the person who has them!³



So, what causes upper back pain?

Most of the pain felt in this region is caused by muscle and/or facet joint irritation. Many very important postural muscles are found in the upper back and will attach to the vertebrae in this area. Notably are the muscles that control shoulder stability—like the *rhomboids* and *trapezius* muscles. In addition, the postural muscles that support the head and neck in a vertical position will find their anchor points in the thoracic spine. These muscles are collectively known as the *erector spinae*.

Whenever a person's posture deviates away from the center of gravity, such as when the head is held forward or the shoulders rounded (two of the most common postural faults), this will put a large compressive load on the joints between each vertebra (the facet joints), leaving them prone to feeling the stress and strain. Also, any minor spinal misalignments (subluxations) begin to feel like major ones when there is any abnormal muscle tension in the area! Pain sensitive structures like joint capsules, ligaments and neighboring nerves can all be irritated by this phenomenon.

Exercise of the Week

Lateral Flexion – Assisted Stretch

Difficulty: Easy to moderate

(Consult your chiropractor before doing this or any other exercise.)

Start: Sit upright in chair.

Exercise: Place one hand on top of head, with fingers pointing down toward opposite ear. Then, allow neck to relax as weight of arm pulls head and neck gently to side. You should not feel pain in this position. Drop shoulder on side you feel the stretch. Hold for 20-30 seconds. Switch sides, and repeat 2X per side.



In addition, where each rib attaches to the spine, there is a set of 3 joints collectively called the costovertebral joints. Since these are functionally movable joints like any other in the body, this means they are also subject to the same stress and strain that other joints experience and they can also subluxate when put under an abnormally high or sudden load. You've heard the expression, "I have a rib out"? This can be a very painful condition where you feel a sharp, stabbing pain on either side of the spine. It may be difficult or painful to take a deep breath, and laying on your back with pressure directly on this area may also be painful.

No matter whether the joint that is irritated belongs to the vertebra or the rib, your chiropractor knows exactly what to do to set things right. You guessed it-the chiropractic adjustment! With the application of this skilled and precise maneuver, the irritated joint can be re-aligned to sit properly, taking the pressure off the sensitive structures that surround the joint (capsule, ligament or nerve). Regardless of which joint it is, once freed from restriction and misalignment, the physiological cascade called "healing" can begin: sometimes the relief from pain is immediate and dramatic; other times it takes a few days for the positive effects of the adjustment to kick in. However, rest assured the adjustment *always* initiates healing.

When the vertebral subluxation is reduced, muscle tension around the joint will also be improved.

However, sometimes extra procedures should be specifically applied to the muscles to create ease and balance in the muscular system. Massage techniques that focus on tight muscles in the area of symptoms have also been shown to reduce pain,⁴ enhancing the already positive effects granted by the chiropractic adjustment.

Finally, if the stress and strain on the upper back is caused by weak postural muscles, exercising and stretching will also be recommended as an effective tool to support your proper spinal alignment long-term.⁵ Many chiropractors are well-versed in the protocols of posture correction and others rely on allied professionals to help instruct their patients in these areas. Discuss what your best options are with your chiropractor.

With chiropractic adjustments and advice, upper back pain can be lifted from your shoulders.



Quote to Inspire

"A healthy outside starts from the inside"

Robert Urich

References and sources:

1. Oppenheim JS, Rothman AS, Sachdev VP. Thoracic herniated discs: review of the literature and 12 cases. *Mt Sinai J Med. 1993 Sep;* 60(4): 321-6.

2. Gloyer MA, Cadosch D, Galldiks N, Gautschi OP. Thoracic disc herniation with affection of the anterior spinothalamic tract: A case report and review of literature. *Neurol India* 2011; 59: 627-8.

3. Wood KB, Blair JM, Aepple DM, Schendel MJ, Garvey TA, Gundry CR, Heithoff KB. The Natural History of Asymptomatic Thoracic Disc Herniations. *Spine 1997 Mar*; 22(5): 525-9.

4. Cherkin DC, Sherman KJ, Kahn J, Wellman R, Cook AJ, Johnson E, Erro J, Delaney K, Deyo RA. A comparison of the effects of 2 types of massage and usual care on chronic low back pain: a randomized, controlled trial. *Ann Intern Med.* 2011 Jul 5; 155(1):1-9.

5. Bruce-Low S, Smith D, Burnet S, Fisher J, Bissell G, Webster L. One lumbar extension training session per week is sufficient for strength gains and reductions in pain in patients with chronic low back pain ergonomics. *Ergonomics.* 2012 Apr; 55(4):500-7. Epub 2012 Mar 8.

Editor & writer: David Coyne Writer: Dr. Christian Guenette, DC Design: Elena Zhukova Graphics: Maria Camille Almirañez Photos: Fred Goldstein Production: Mike Talarico

Disclaimer: Information contained in The Wellness Express[™] newsletter is for educational and general purposes only and is designed to assist you in making informed decisions about your health. Any information contained herein is not intended to substitute advice from your physician or other healthcare professional.