

OPTIMAL HEALTH UNIVERSITY™

Presented by Dr. Wayne Terai

Chiropractic for Middle Back Pain Part II: Less Common Causes and Research

Middle back pain is a common reason why patients seek chiropractic care. Fortunately, chiropractic is highly effective in correcting most cases of middle back pain.

Most cases of pain in the middle back are associated with a widespread condition called vertebral subluxation. This occurs when spinal movement is restricted or spinal bones (vertebrae) become slightly misaligned. Doctors of chiropractic, like Dr. Terai, correct vertebral subluxations with gentle and effective maneuvers called chiropractic adjustments.



Part one of this two-part *Optimal Health University™* series on middle back pain provided an overview of the most common causes of vertebral subluxation and related pain in the middle back. Now, part two will delve more into the anatomy of the middle back and the lesser common causes of middle back pain.

In addition, part two provides a sampling of scientific research supporting the use of chiropractic for the relief of middle back pain.

Anatomy of the Middle Back

The middle back is known as the *thoracic area*. The word *thoracic* is related to *thorax*. The thoracic area defines a portion of the back spanning

from below the neck to above the waist.

The thoracic area is supported by the *thoracic spine*, which consists of 12 spinal bones called *vertebrae*. These small interlocking bones form a rigid column that houses and protects the spinal cord.

Each vertebra is connected to a rib. This connection is located at a protuberance on the sides of vertebrae called a *transverse process*. The joint receives additional stability from surrounding ligaments and muscles.

The rigidity of the rib cage limits flexibility and movement in the thoracic spine. Dr. Terai explains to patients that this is why middle back pain — while still common — is not as prevalent as pain in the more flexible neck and lower back areas.

Less Common Causes

Fortunately, research shows that over 99 percent of cases of middle back pain stem from mild and easily treatable musculoskeletal dysfunctions (*Cleve Clin J Med* 2008;75:557-66).

Most of these cases are related to vertebral subluxations and may be corrected by chiropractic care. Part one of this series discussed these common causes of thoracic pain.

Dr. Terai also screens patients for less common causes of thoracic pain, some of which may require referral to another health-care professional.

Tips for Avoiding Middle Back Pain From Dr. Wayne Terai

Maintain regular chiropractic visits to keep your back pain-free and achieve optimal health.

If you play sports, check your form. Proper form in any sport protects muscles and joints by minimizing overuse and over-extension.

Keep your core muscles (the chest, spine and pelvis) strong so that they can stabilize your spine. Yoga and Pilates are two great practices for enhancing core strength.

Practice sound ergonomics to protect your back. Dr. Terai can help you analyze your workstation to optimize comfort and spinal health.

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The less common causes of middle back pain include:

Fracture

Unlike the spine of the neck (cervical spine), which has far less stability and is more prone to injury, vertebrae in the thorax region are considerably more stable. Supported by their surrounding ligaments, these vertebrae are also protected by the rib cage. However, it is still important to rule out fracture in this area, especially in cases of trauma.

According to research “the commonest cause of fractures of the thoracic lumbar spine is hyperflexion with rotation resulting from falls, direct trauma, or road traffic accidents.” (*Br Med J* 1993;307:1552.)

Fracture is also a real possibility in sports injuries. Researchers explain that because symptoms of trauma in this “relatively immobile area of the spine may be nonspecific, a thoracic spinal fracture may go undetected, possibly exposing the individual to further injury if athletic activities are resumed.” (*Am J Sports Med* 1993;21:57.)

Ribs may also be subject to fracture, especially in cases of trauma, such as a sports injury or motor vehicle accident.

If the doctor suspects a fracture, x-rays or other imaging studies will be ordered.

Herniated Disc

Intervertebral discs are “cushions” between spinal bones (vertebrae). The center of these discs is a gel-like substance, which is surrounded by a more fibrous perimeter. A disc prolapse or herniation occurs when a portion of the gel-like center moves into the perimeter of the disc, causing the edge of the disc to jet out. In some cases, the gel-like substance leaks out of the disc.

Herniated thoracic discs are less common than cervical or lumbar ruptures. However, they do occur. Pain radiating outward from the mid-back region

is the most frequent complaint (*Am Fam Physician* 1992;45:2162).

If the doctor suspects a disc herniation, imaging studies may be ordered.

The good news is that chiropractic care may offer relief for patients with disc herniation, often preventing the need for surgery and extensive rehabilitation.

One study followed 49 patients with a herniated disc and radiating pain. The patients underwent chiropractic care and physical therapy. After an average of 13 visits, the patients reported an average improvement of 78 percent. What’s more, nearly 90 percent rated their improvement as either “good” or “excellent.”

These results remained over the long-term. When the researchers followed up 14.5 months later, the patients rated their improvement an average of 81 percent, with 80 percent of patients rating their improvement as “good” or “excellent.” (*J Manipulative Physiol Ther* 2009;32:723-33.)

Organ Problems

In rare cases, referred pain in the middle back can be a sign of a gall bladder disease, a kidney stone or a cardiovascular problem. In even more rare instances, thoracic pain may indicate cancer in the lungs or breasts. If the doctor suspects an organ may be the source of your middle back pain, you will be referred to an appropriate health-care professional.

Research Supports Chiropractic

Research backs up the efficacy of chiropractic care for middle back pain. For instance, one study revealed that chiropractic greatly outperformed a placebo treatment for thoracic pain both immediately and one month after care (*J Manipulative Physiol Ther* 2001;24:394-401).

In a massive survey of over 2,000 patients, chiropractic care was rated “very helpful” in relieving back pain by 61 percent, while just 27 percent said the same of conventional medicine (*Spine* 2003;28:292-7).

Research also indicates that chiropractic care reduces recovery time as well as the need for pain medication to manage back pain (*Orthopedics Today* 2003;23:14-15).

This is particularly good news given the myriad side effects of pain medications that are often ineffective in reducing back pain. Over-the-counter pain relievers are linked to ulcers, stomach bleeding, asthma and breast cancer. And, research shows that steroid injections for back pain often cause complications including herniated discs and infections (*Chiropr Osteopat* 2009;17:6).

Middle Back Pain? We Can Help!

If you suffer from middle back pain, schedule an appointment for a chiropractic evaluation today. The doctor will screen you for common and less common causes of this widespread condition.



Have you read part one of this series? This Optimal Health University™ handout is part two of a two-part series on middle back pain. If you missed part one, please ask at the front desk for a copy.

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