

S&E Center Enhanced Modalities Treatments

Thoracic Spine Pain Program

Thank you for considering ***Spine & Extremities Center*** for your care. This document is for general informational purposes regarding common issues and questions for patients who have thoracic spine or mid and/or upper back pain. Please refer to our general informational handout for a more detailed discussion of the regenerative physical medicine modalities we use at our office.

“Typical” Symptoms, History, Imaging Findings

Patients often have pain in between their shoulder blades and often aggravate their pain with a slumped posture or driving in a car. Some patients often have been told by a physical therapist or chiropractor that they had a “rib out”.



Patients in these programs may have had chiropractic care or physical therapy in the past with some success but have off and on recurrent episodes.

Many patients report that their pain is relieved by spinal manipulation, but then symptoms quickly recur.



X-rays often show no significant findings in the thoracic spine, but may have mild degenerative disk disease, vertebral body spurring, or thoracic “spondylosis”. Ultrasound can be of benefit if an occult muscular injury is suspected. MRI is not commonly performed in patients with uncomplicated thoracic spine pain because spinal stenosis, disc herniations, and nerve impingements are uncommon in the thoracic spine as this portion of the spine is reinforced by the rib cage. Most disc herniations in the thoracic spine are very tiny and do not cause compression of any neural elements but may cause pain. CT scans are usually reserved for patients who had trauma and are suspected of having a fracture that needs characterized. X-rays may be ordered to help exclude spinal conditions that would contraindicate spinal manipulation such as large bridging spurs along the front of the spine.

How we may be able to help...

We offer several modalities as well as manipulation and corrective exercise treatments that can be used to help heal the soft tissues and supporting structures in your thoracic spine region to help reduce your pain, decrease stiffness, increase range of motion, and rely less on spinal manipulation to alleviate your problems since manipulation is often only a temporary solution in many cases. This allows you to do your daily and recreational activities with decreased or no pain and overall may therefore improve your quality of life.



Some patients receive these treatments to be able to continue with their physically demanding work. Some just need relief from the pain as it interferes with their enjoyment of life. Others get treated to improve recovery and enhance performance for a wide range of sports and athletic activities. Specifically, this protocol is to address the underlying structural issues in the thoracic spine and posterior rib articulations that can contribute to this pain. Often this is a combination of a strain/sprain of a spinal ligament(s) either in between the spinous or transverse processes, or a ligament or joint capsule associated with the posterior aspects of the ribs as they articulate with the thoracic spine. Many stabilizing muscles support each level of the spine, and any tendinous attachments could generate pain if inflamed or diseased.

The muscle spasm/hypertonicity that most people feel in this area is often more of a reaction of the body to the underlying structural pain generating tissue. The pain signals the body to limit motion of an injured body area as a natural splint. This “splinting” is accomplished by tightening of the muscles as they try to assume



some of the support of the torso to take pressure/tension off the painful ligament. The immobility from the muscle tightness causes restricted movement in the joints of the thoracic spine and ribs. Therefore, in many patients we will include manipulation into part of the therapy program.

Our **HEIT and Class IV Medical Laser** are often both used to decrease muscle spasm as well as relieve pain by inhibition of painful nerve impulses. **HEIT** is also used for muscle reeducation. Additionally, the **Class IV Medical Laser** helps increase blood flow and oxygen delivery to the tissues to support healing and regeneration while at the same time infusing the tissues with laser energy which targets the mitochondria at the cellular level to produce ATP, the “currency” of cellular energy.

One of our providers will do a structural and functional examination of your spine on or prior to the first treatment day and correct any segmental restrictions in your thoracic spine, rib articulations, and release any fascial distortions manually. Following this first treatment, most manipulation would be used sparingly during the 6-8 week modality program.



Shockwave Therapy

Our program includes **Shockwave** with the **PiezoWave 2T** from **Elvation Medical USA** and **Radial Pulse Shockwave Therapy** utilizing the **enPulsePro** from **Zimmer Medical Systems** as the foundations of the treatment. These are highly effective modalities to stimulate tissue healing over time and decrease pain and muscle spasm quickly.

By using the non-focused mechanical pulse wave, we attempt to stimulate the various pain generating structures to inhibit pain signaling and



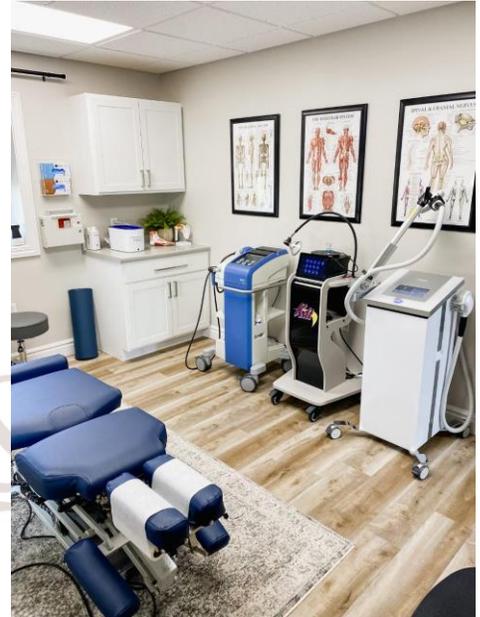
elicit a regenerative response from the body. We are turning chronic, diseased tissue into acute, healing tissue. The combination of

our advanced treatment modalities will be based on your diagnosis, imaging review, and response to therapy sessions. Most thoracic myofascial/spine pain patients are also treated with a combination of **focused Shockwave, High-Energy Induction Therapy (HEIT), and Class IV Medical Laser therapy**. Please refer to our website for descriptions of these modalities.



Program notes

- **Six sessions** are performed using combinations of our two **Shockwave Sources, HEIT, and Class IV Medical Laser** depending on your specific condition, progress, and feedback. Initial treatment is to be completed over 6-8 weeks. Treatment sessions are often 45 minutes depending on if you add on any other treatments such as osteopathic manipulation, chiropractic, or massage services.



Fees (not covered by insurance)

- The complete, comprehensive six-session program is **\$795**.
- **Shockwave Therapy** can be chosen alone. This is **\$595** for six sessions.
- **Osteopathic Manipulative Therapy (OMT) or Chiropractic adjustments** can be scheduled separately if desired. These are **\$30** additional for 1-2 spinal regions.

Patients often have continued improvement for several months after the sixth session. Although most patients feel a very significant improvement in pain and decreased stiffness during the program, our treatments are also initiating a regenerative process and it takes time for the body to fully repair the chronically damaged tissue.

