

S&E Center Regenerative Modalities Treatments

Lumbar Spine 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 lumbar spine or lower back pain.

“Typical” Symptoms, History, Imaging Findings

Patients often have pain in their lower back, either in the mid lumbar region or along the lower back where the lumbar spine meets the pelvis (lumbosacral). Bending over or twisting often aggravates their pain. Some patients often describe flares as they “threw their back 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 briefly by massage or spinal manipulation, but then symptoms quickly recur.***

X-rays often show chronic findings in the lumbar spine such as degenerative disk disease, vertebral body spurring, or lumbar “spondylosis”. Ultrasound can be of benefit if an occult muscular injury is suspected. MRI is commonly performed in patients with chronic or severe acute lumbar spine pain because spinal stenosis, disc herniations, and



nerve impingements are common in the lumbar spine as this portion of the spine is only stabilized by many individual ligaments, muscles, and fascial bands. Most disc herniations in the lumbar spine are broad based and do not cause compression of any neural elements but may cause pain through what is known as “neoinnervation”. CT scans are usually reserved for patients who had trauma and are suspected of having a fracture that needs characterized or cannot have an MRI for various reasons. 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 or recent fractures.

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 lumbar spine region to help reduce your pain, decrease stiffness, increase range of motion, and rely less on spinal manipulation or massage to alleviate your problems since manipulation and massage are often only a brief 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.

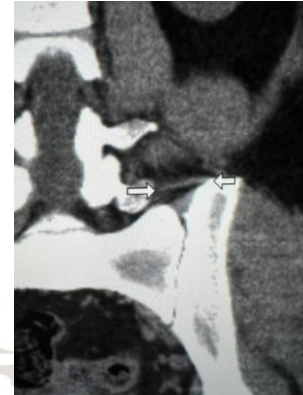
Some patients receive these treatments to be able to continue with their physically demanding work. Some just need relief from the pain as it interferes with their enjoyment of life. Others get treated to improve recovery and enhance performance for a wide range of sports and athletic activities.



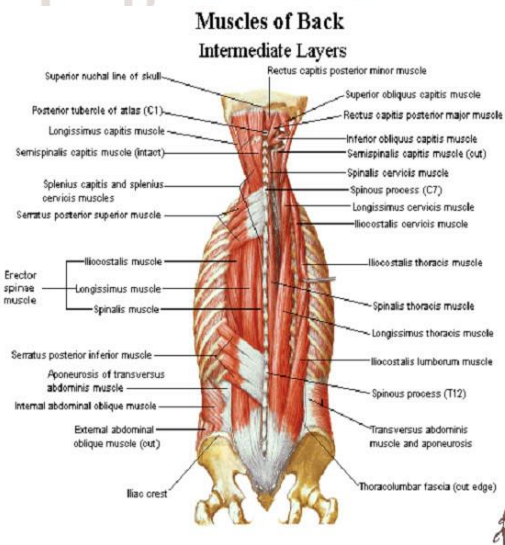
Structures often targeted

In addition to your specific pain generators that we uncover during your evaluation and initial modality treatment sessions, we include directed treatments to reinforce the structural integrity of your lumbosacral spine:

- Iliolumbar ligaments and lumbosacral ligaments
- Posterior Sacroiliac ligaments, sacrospinous ligaments, sacrococcygeal ligaments
- Interspinous and supraspinous ligaments
- Multiple muscle insertions primarily along the posterior chain muscles
- Each synovial (facet) joint of your lumbosacral spine



This protocol is to address the underlying structural issues in the lumbar spine and upper pelvis 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 one of the ligaments associated with the lumbosacral junction such as the iliolumbar ligaments or sacroiliac ligaments. 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



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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 muscle tightness causes restricted movement in the joints of the lumbar spine and pelvis. Therefore, in many patients we will include manipulation or massage 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. The **Class IV Medical Laser** increases blood flow and oxygen delivery to support tissue healing and regeneration while at the same time infusing the tissues with 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 lumbar spine, lumbosacral articulations, sacroiliac joints, and release any fascial distortions manually.



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Shockwave Therapy

Our program includes **Focused Shockwave Therapy** utilizing the **Piezowave 2T** from **Elvation Medical, USA** as the foundation of the treatment. It is a highly effective modality to stimulate tissue healing over time and decrease pain and muscle spasm quickly. By using the focused mechanical pulse wave source, we attempt to stimulate the various pain generating structures to inhibit pain signaling and elicit a healing response from the body. The mechanical stimulus causes migration of healing cells and subsequent cellular signaling to the body to increase production of many biologically active healing and cellular chemicals/growth factors.



The focused **Shockwave** is targeted at the supporting ligaments and the therapeutic pulse causes a tightening and strengthening of the ligaments by increasing collagen production and decreasing abnormal, degraded ligament fibers. The result is a structural improvement and a resilient cohesive strong lower back to facilitate an active lifestyle. We also apply pulses into the bone within each lumbar facet joint to break up adhesions in the capsule, increase lubrication, decrease bone marrow edema from arthritis and overuse, and overall improve the health of the 12 joints of your lower back.

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



Program notes

- On your first modality treatment day, additional time/pulses with ***focused Shockwave Therapy*** will be performed to help in localization of your pain as there are many pain generating areas along the thoracic spine and rib articulations. If spinal manipulation is not contraindicated in your case, this will likely be performed during your assessment.
- **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 about 8 weeks. Further treatments are sometimes needed to maintain your improved state. The frequency varies depending on your lifestyle, desired level of pain/functional outcome, and self-care.



Fees (not covered by insurance)

- The complete, comprehensive six-session program is **\$795**.
- A ***Shockwave Therapy*** only option can be chosen. This is **\$595** for six sessions.

Patients often have continued improvement in their symptoms for several months after the final session. Although most patients feel a very significant improvement in pain, increased range of motion, and improved function 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.

