

S&E Center Regenerative Modalities Treatments

Achilles/Patellar/Quadriceps Tendinopathy

Thank you for choosing *Spine & Extremities Center* for your care. Our contribution to your care will be utilizing a combination of the regenerative non-invasive physical medicine modalities of *Shockwave Therapy, Class IV Medical Laser Therapy, and High Energy Inductive Therapy (HEIT)*. This is used for tendinopathies, commonly seen in the Achilles' tendon, Patellar tendon ("Jumper's Knee"), and Quadriceps Tendon ("Runner's Knee"). This protocol is most often used before a rupture occurs and surgery is necessary, but has great effect on healing and restoring structural integrity after surgical repair if a rupture has occurred.



Our modalities used for this program are Shockwave Therapy, HEIT Therapy, and Class IV Medical Laser.



A Shockwave treatment being applied to the Achilles' tendon insertion.



Goals

Our goals for you in this program are to initiate a healing response in the damaged tendon and surrounding tissues to 1) decrease pain, 2) improve function, 3) regenerate a healthy strong tendon and 4) reduce the recurrence rate. Our modalities also typically result in more immediate reduction of pain by inhibition of multiple pain generating tissues that occur with these types of tendon diseases such as Achilles peritendinitis, retrocalcaneal bursitis,



inflammation in Kager's Fat Pad (ankle), Hoffa's Fat Pad (knee), and address the dysfunction in the muscles with these conditions. These muscles are the quadriceps in the knee disorders, and the gastrocnemius/soleus in Achilles tendinopathy.

There are many potential pain-generating tissues that can be contributing to your condition. During your evaluation and dynamically during your six

treatments, multiple structures other than the tendon itself will continually be reassessed with our focused *Shockwave Therapy* source for treatment

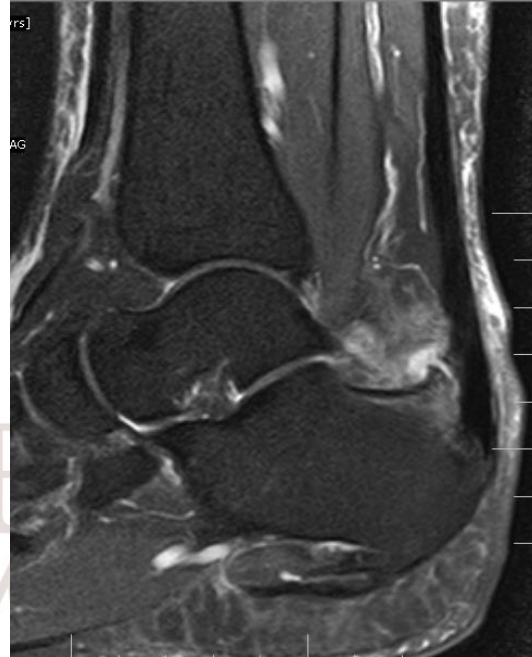


response and identification of chronic and emerging pain generators in your knee, ankle, or foot.



For example, in **Achilles' tendinitis** these include:

- The various components and supporting tissue around the Achilles' tendon.
- Referred pain structures in the foot and ankle.
- Bone at the insertion of the Achilles' tendon in your heel as there can often be bone marrow edema from the disease process which is associated as a pain generating structure.
- Bursal structures along the back of your heel.
- Kager's Fat Pad, a soft-tissue supporting & cushioning structure underneath the Achilles' tendon.



For example, in the two common knee tendon disorders these include:

- The deep and superficial portions of the quadriceps and infrapatellar tendons and supporting tissue around the tendon such as the patellar retinaculum and plica.
- Referred pain structures in the thigh and knee. Quadriceps trigger points are common.
- Bone at the insertion of the tendon in your patella as there can often be bone marrow edema from the disease process which is associated as a pain generating structure.
- Bursal structures along the front and sides of your knee.
- Hoffa's Fat Pad, a soft-tissue supporting & cushioning structure underneath the patellar tendon.



Class IV Medical Laser is typically added for its ability to increase blood flow and oxygen, and by its analgesic (pain relieving) effects through a process called photobiomodulation. It may also help modulate and accelerate the healing response initiated by *Shockwave Therapy*. It is performed each session following the *Shockwave* application. By stimulating regeneration of the tissue and ingrowth of new blood vessels to bring oxygen, nutrients, and healing chemicals to the area we hope to prevent or significantly reduce recurrences.

Summary of program and fees

Our protocol is **six (6) sessions** of combined *Shockwave Therapy*, *HEIT* and *Class IV Medical Laser Therapy* over 8-10 weeks. HEIT will be added in perhaps 2-3 visits. This is performed by one of our staff members trained in these advanced modalities. The first session can often be performed on the initial visit. Subsequent visits are 1 week apart and as you progress these treatments will be further spaced apart as the healing/regenerative process occurs.



Class IV High Energy Laser Therapy

- ✓ **\$545** - *Shockwave/Medical Laser/HEIT* (Comprehensive).
- ✓ **\$395** - *Shockwave Therapy* as a single modality.



General advice

We ask that you also continue conservative care that is medically accepted or was previously advised for your condition. Such as, but not limited to, orthotics, or weight loss if advised by your primary care physician, excessive running and standing on hard surfaces for long periods of time, etc. Please avoid or limit the use of ice during therapy, and do not take NSAIDS in at least the first 48 hours after a ***Shockwave Treatment***. Attempt to avoid NSAIDS completely if possible. Tylenol can be used for pain.

Some services at this office are billed to insurance such as musculoskeletal ultrasound, therapeutic steroid injections, and trigger point injections. The advanced regenerative physical medicine modalities at ***Spine & Extremities Center*** discussed in this program are considered investigational although there is extensive peer-reviewed medical research available on their efficacy. Insurance does not reimburse for treatment with these modalities, and they are self-pay fee-for-service. As with any medical or surgical procedure, there is no guarantee as to outcome or result. Because many conditions we treat are chronic and recurrent, additional sessions may be required to maintain your result.

Patients often have continued improvement in their symptoms for several months after the sixth 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.

