



INTRODUCING SHOCKWAVE

As one of the leading soft tissue manual therapy and rehabilitation clinics in Calgary, we are excited to introduce the use of shockwave therapy for patients suffering from chronic bone and soft tissue injuries.

The following are conditions effectively treated:

- Tendinopathies of all kinds (elbow, knee, shoulders, etc.);
- Myofascial trigger points;
- Bursitis;
- Plantar fasciitis;
- Scar tissue;
- Calcific tendinopathy;
- Stress fractures;
- Etc.

In shockwave therapy, we use the forces of high energy sound waves to stimulate the metabolism cascade for the purposes of both remodeling and regenerating tissue and bone. The proven effectiveness of shockwave therapy has strong implications for orthopedic medicine where injuries have been unable to heal on their own.

In a randomized controlled trial by Dr. Ching-Jen Wang MD et al in 2002, a set of 57 patients with lateral epicondylitis were randomly allocated into either a sham treatment group or a shockwave therapy group. A 100-point scoring system was used to evaluate for pain, function, strength, and elbow range of motion. The results were favorable for fully eliminating the symptoms of the injury among 61.4% of the patients in the shockwave therapy group. The sham treatment control group did not report any improvements. The participants were followed up for 1-2 years, which demonstrated the long-term effectiveness of the modality. (This study can be found in the American Journal of Sports Medicine, Vol. 30, No. 3, published in 2002).

A 36-year-old male presented with 3 months of intermittent pain localized to the medial fibers of the left achilles tendon. He is active with crossfit, running and biking. Pain was reproduced only with loaded heel raises, and along the distal achilles tendon there is a palpable nodule which was painful when given the orthopedic tendon squeeze test. Diagnostic ultrasound was remarkable for mild fusiform thickening of the left achilles tendon, which measured up to 7.5 mm (normal is reported at 5.5 mm).

Treatment consisted of manual soft tissue release to the posterior leg and plantar musculature. Additionally, direct orthopedic cross friction and functional range release to the achilles tendon were also applied to help remodel the injured tendon. The patient demonstrated mild improvements but still had ongoing discomfort with loaded heel lift. A series of 6 shockwave treatments was added to his therapy. This modality was directed towards the medial and lateral tendon fibers, and also at the calcaneal insertion. After the 4th shockwave application, the patient reported improvements with his physical activities, and a perceived 75% improvement in reported pain on the pain scale. Loaded heel lift was no longer reported painful, and was only slightly stiff. Thus, in this case, in order to further remodel the injured achilles tendon, conventional conservative manual therapy required the addition of shockwave therapy.

CASE STUDY: