

Shockwave Therapy

Elbow and shoulder pain are very common patient concerns. Overuse injuries to tendons or the flare up of chronic injuries are a common cause of this pain. For the past two years at the Adjusted For Life clinic we have been getting excellent outcomes with tennis elbow, rotator cuff tendinopathy and planter fasciitis using shockwave therapy.

Therapeutic shockwaves were introduced as a medical treatment for eliminating kidney stones 20 years ago. Radial pressure waves are pulses generated by compressed air which is used to drive a projectile in a cylinder, located inside the hand piece, to a shock transmitter. The kinetic energy generated by the motion and weight of the projectile, converts into acoustic energy when the projectile hits the shock transmitter. The acoustic pulses then spread into the underlying tissue

Physical Effects of Shockwaves

- **Pain reduction:** The patient experiences a reduction of pain, explained by the Gate Control Theory. Intensive pulses from the transmitter into the tissues create a strong nociceptor activation of the A-B fibers, which affect interneurons that inhibit the transmission of the pain signals.
- **Increased metabolism:** Shockwaves influence the tissues on a cellular level. The chemical environment of the cells is affected by free radicals promoting the release of pain and inflammatory inhibiting substances.
- **Revascularization:** Repeated shockwaves to the affected area create a revascularization effect, with the new blood flow in the area promoting tissue healing and regeneration.
- **Reduced muscle tone:** The “vicious circle”, as well as the strong pathological association between pain and muscle tone, will be broken.

Radial Pressure Wave Treatment

A treatment with radial pressure waves requires a hand piece with a transmitter tip especially designed for the treatment. Gel is applied to the skin in the treatment area.

Treatment is first applied directly to the painful insertion points and then to the remainder of the muscle belly.

Depending on the indication, a total of 3-8 sessions with 5-10 days intervals between treatments is the most common treatment frequency. Initial success of the treatment can generally be evaluated after 3-4 sessions, but additional improvement can be seen up to 3 months after the treatment concludes.

The possible side effects are minor and include: reddening, swelling, pain, hematoma and petechiae (red spots). Side effects - if any - usually appear within 2 days of the treatment having been performed, they usually fade and disappear after 3-5 days. Treatment is not repeated until previous side effects have diminished.

Read What Our Patients Said About Their Shockwave Treatments!

Dr. Davidson saved my shoulder

A couple of winters ago I collided with another skier. As a result my shoulder became progressively painful and dysfunctional. Not only did I have to stop swimming, I could no longer enjoy a good night sleep. My previous doctor diagnosed me as having calcific tendonitis, which then led to a referral to Dr. Les Davidson by a colleague of his. The plan was for 6 'shock wave' treatments of the shoulder. This procedure worked right away. Throughout the process the pain has gone away and my motor function is completely back to normal. "Before and after" x-rays further confirmed the disappearance of the nuisance calcification. I am now back to swimming and soon will commence tennis, a favourite sport of my childhood!

I would not hesitate to recommend Dr. Davidson for chiropractic work especially in regards to 'shock wave' treatments.

Nancy M. RN

After suffering for over a year with nagging tennis elbow pain, Dr. D suggested I try shockwave treatment. After just 4 treatments it was significantly improved and after six it was completely gone. The best part is that my health plan also covered most of the cost. As an extremely active individual I was able to return to the same level of activity afterward.

Thanks to Dr. D. and his team for all your help! Gretchen C.