Acoustic Wave Therapy

what it is | how it works | clinical benefits

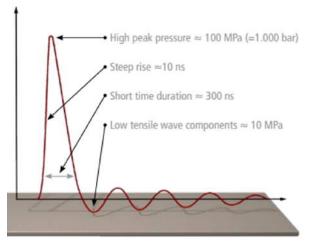
What is an acoustic wave?

An acoustic wave is a strong pressure wave in any elastic medium that creates significant changes in pressure.

Acoustic waves alter the mechanical, electrical and thermal properties of solids and thus, have recently been found to aid in the healing process within the body.

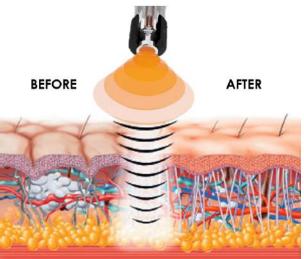
The physics behind Acoustic Wave Therapy

Rather than the use of light (laser treatment), thermal energy (ultrasound techniques) or electrical stimulation (PEMF or e-stim), Acoustic Wave Therapy (AWT) helps to promote healing by delivering *mechanical* energy to an affected area.



AWT vs. ultrasound therapy

Ultrasound therapy is comprised of one continuous wave with a frequency range of 0.75–3 MHz, which is used to promote deep healing within the damaged soft tissues of the body.



AWT, however, consists of several continuous sound waves (or acoustic pulses) which have high amplitude, are very short in length and place negative tension on the body's tissues.

AWT vs. laser treatment

Laser therapy is a type of treatment that uses intense beams of light.

AWT uses sound waves (or acoustic pulses) instead, which are pressure waves similar in nature to thunder and lightning or an airplane breaking the sound barrier.

Clinical benefits of AWT

Many physicians who utilize AWT on their patients have reported post-treatment results such as:

- relaxation of muscle and connective tissue
- improved microcirculation
- noticeably elevated stimulation across the injured area
- acceleration of metabolic activity
- heightened neurovascular performance
- increased serotonin hormone release
- significant stress reduction as a result of lowered cortisol levels
- overall revitalization, following a patient's completed course of treatment

General details of Acoustic Wave Therapy procedures

A non-invasive probe is applied to the skin. An electrical charge creates an energy wave, which is focused on the injury or area of concern.

The acoustic waves create a force on the tissues, which can induce healing.

The origin of Acoustic Wave Therapy

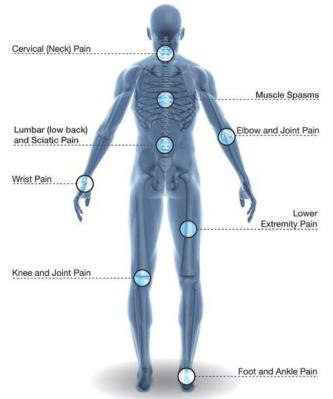
Acoustic Wave Therapy was first developed in the 1960s after first being discovered during World War II. Its first medical use was to break down kidney stones (which was a medical breakthrough for its time), as surgery was extremely invasive to the body.

By the 1980s, after decades of use on kidney stone removal, AWT technology was fine-tuned to be used therapeutically—by assisting in the repair of damaged tissues in the body.

Treatment with the use of AWT eventually made its way to Canada in the late 1990s, and is now widely used in therapy clinics in the U.S. and across the globe today.

The results of AWT for therapeutic use

Almost immediately upon receiving treatment, many patients may notice improvements such as a reduction in pain and/or increased mobility.



These results may generally last for 5-8 days but some slight discomfort could, in some cases, return prior to a patient's next scheduled treatment.

Most patients, however, could become free of discomfort over the following 2-3 weeks, when the body's natural healing process begins to take place.

On average, healthcare providers currently using AWT at their practices have reported an approximate 75% rate of complete recovery among their patients.

Why Acoustic Wave Therapy is safe

Acoustic waves are only sound waves, which have never been found to cause long-lasting side effects or damage.

Additionally, AWT does not alter cell structure, which means acoustic waves have no effect on nerves, bones or organs in the body.

Conditions treatable with the use of AWT

Acoustic Wave Therapy may aid in the treatment of acute, chronic or painful soft tissue lesions of the musculoskeletal system.

AWT may also be helpful for the following conditions:

Arthritis	Carpal Tunnel Syndrome	Knee clicking / grinding	Muscle / tendon sprains
Heel spurs	Chronic back pain	Plantar Fasciitis	Tendonitis
Diabetic Neuropathy	Chronic edema	Achilles Tendonitis	Bursitis
Bone fractures	Chronic neck pain	Sciatica	ITB Syndrome
Bunion removal	Chronic pelvic pain	Shin splints	Rotator cuff pain
TMJ	Frozen Shoulder	Shoulder impingement	Carpal Tunnel Syndrome
Bed sores	Tennis Elbow	Sprains	Scar tissue

