

Comparison of Cold Laser, Acupuncture, Ultrasound And TENS Therapies For Pain Control

The following table compares several "alternative" therapies and tries to make distinctions for each technology. This table is targeting patients with pain control issues. All these therapies are appropriate for some patients and all should be considered for dealing with special health issues. The information is presented here for general purposes. You should consult a local practitioner to help select the best therapy for your specific health problems.

	Cold Laser	Acupuncture	Ultrasound	Electrical Stimulation
Pain Control	Joint, Head, Migraines, Muscular	Joint, Head, Migraines, Muscular	Joint, Muscular	Muscular
Benefits	Increase circulation, faster healing. May reduce inflammation. May permanently eliminate acute and chronic pain.	Increase circulation, faster healing. May permanently eliminate acute and chronic pain	High-energy sound waves penetrate deep into tissue to cause tissue/muscle warming, increased vessel vasodilatation and increase circulation. Short-term changes in cell membrane permeability.	Electrical stimulation produces a mild current that can prevent pain messages from being transmitted to the brain. May raise the level of endorphins (natural pain killers produced by the brain).
Tissues Affected	Absorbed by all tissues including skin, subcutaneous, tendons, muscles, and nerves	Direct tissue contact, may result in bruising and bleeding	Absorbed by white connective tissue	Muscle tissue only
Treatment Times	2-6 Minutes	20-60 Minutes	5-8 Minutes	15-20 Minutes
Body Contact	Dry contact	Penetration of skin	Requires gel or water medium	Requires electrodes
Patient Comfort	Soft sensation or no sensation (may feel warm)	May experience pain or spasms while needles are in place	Discomfort with excess heating of tissues (especially if not moving electrode)	Mild to severe discomfort with tingling and potential burning
Use On Children	Ok for use on children	Usually limited to acupuncture	Use caution	Use extreme caution
Patient Restrictions	Do not use over suspicious or cancerous lesions, or on pregnant women	Do not use on suspicious or cancerous lesions, or on pregnant women	Not for use with patients with circulation or neuropath conditions, pacemakers, cancer, or pregnant women	Not for use with patients with circulation or neuropath conditions, pacemakers, cancer, or pregnant women
Cautions	Eye protection Required	Proper sanitary procedures required since skin is broken	Potential tissue damage	Potential for burns and blisters Potential for cardiac arrhythmia. Electrode placement is critical
Administration	Very little training required for safe operation. No license required for lower power levels.	Therapy must be performed by a well-trained professional to be safe and effective.	Therapy must be performed by a well-trained professional to be safe and effective.	Can be self-administered but requires proper training to be safe and effective.
Notes:	Also called Low Level Laser (LLL) Can be used in conjunction with other therapies	Can be used in conjunction with other therapies		"TENS" is the acronym for Transcutaneous Electrical Nerve Stimulation.

There is significant overlap between these therapies. In some cases, it may be best to use more than one therapy to maximize healing and shorten your recovery period. Each patient and each condition is unique. Always consult a professional when evaluating therapy options including cold laser therapy.