The Acuscope-Myopulse System

Contents

A **Clinical System** consists of three separate instruments and a wide array of probes and electrodes that are interchangeable, providing for widely diverse treatment applications. Conductive solutions and creams are formulated to insure consistent trans-dermal (through the skin) current velocity (speed of transmission), as micro-amperage carrier waves move back and forth between living tissue and the modalities' computerized circuitry.

Electro-Acuscope – Neurological Biofeedback (Input) combined with variable Squarewave (Output) used to address issues in peripheral nerve conductivity (The Nervous System) and nerve endings; also the Central Nervous System (brainwaves). Reduces swelling and inflammation; improves depleted/atrophied conditions. *

Electro-Myopulse (Body Calibration) – EMG Biofeedback (Input) combined with variable Sinusoidal (Output) used to directly affect connective tissue (muscle-tendon-ligament-fascia) and resolve sprains, strains, tears, tightness, trigger points, knots, spasms and promote faster recovery after injury or surgery.

Electro-Myopulse (Head-Neck-Face Calibration) – EMG Biofeedback (Input) combined with variable Sinusoidal (Output) calibrated for the delicate, superficial muscles attached underneath the skin of the face. Has a restorative and rejuvenating "lift" effect to facial features; reduces fine lines and wrinkles; and is used for facial pain syndromes such as TMJ, tension headaches, and neck conditions (e.g., "whiplash"). Also for pre- and post-op facial restoration surgery.

*Portable Models are available for home use and home visits by Healthcare Professionals.

For a detailed, in-depth introduction to Acuscope-Myopulse Biotechnology, please visit my website: www.acuscope-myopulse.com See page entitled **Instrumentation** for specs of each piece of equipment; **Treatment Procedures** for a photo-illustrated look at therapeutic applications of the accessories used with these modalities; **Research and Studies** for scientific background documentation.

Here is a Brief Overview

Treatment with advanced biofeedback-regulated microcurrent technology called the Acuscope-Myopulse System, has been proven in countless cases for more than 30 years to help eliminate painful conditions resulting from chronic or acute physical injury, and increase the speed of post-op recovery. In addition, as a result of its influence directly upon nerves and brainwaves, it serves to provide a way to diminish the symptoms of psychological stress disorders, conditioning a "Relaxation Response" into the Nervous System.

Unlike a shot or a pill, there is no immediate analgesic effect from treatment with the Acuscope and Myopulse. Just the opposite; nothing is camouflaged. In fact, the less medication in the system, the more clearly the equipment can "read" and send a corrective influence to help to resolve the underlying problem(s).

Microcurrent stimulation is known to boost cellular metabolism to normal levels, promoting ATP production and improved ion transport across the cell membrane (see documentation in Research and Studies section of www.acuscope-myopulse.com). Within connective tissue, electrical potentials are restored to full capacity.

The increased bioavailable "energy" is used for cellular self-repair work. If the treatment process is repeated in close succession over several days, change is immediate and obvious. In a few weeks, it has a holding and lasting impact. In other words, there is a cumulative effect from a series of treatments. Severe cases may require a commitment to treatments over one to three months, occasionally longer. If combined with faithful adherence to Healthy Lifestyle Habits, complete recovery is nearly guaranteed in the majority of cases.

How is this Equipment Different from other Electrical Stimulation Devices?

The Electro-Acuscope is FDA registered under the category of TENS (Transcutaneous Electrical Nerve Stimulation) modalities – and can be billed to insurance as such; both attended and unattended. However, it is unlike common, ordinary TENS devices which are used to temporarily block pain signals from arriving in the brain by sending a blast of milli-amperage current into the painful tissue (Melzack & Wall "Pain Gate" Theory). In contrast, the Acuscope's microcurrent helps to resolve underlying issues at a cellular level with "bio-identical" square waveforms and minimal amperage (only up to maximum 600 uA) which has been proven to enhance cellular metabolism; whereas it has been discovered that milli-amperage (1 mA) electrical stimulation actually decreases ATP production, etc. (Ngok Cheng, et al. See Research document.)

The Electro-Myopulse falls under the category of FDA registered EMS (Electrical Muscle Stim) modalities – and can be billed to insurance as such; both attended and unattended. However, it is unlike common, ordinary EMS devices which utilize high voltage and milli-amperage to elicit muscle contraction, tetanize the tissue, will initially improve blood flow but eventually will cause muscle fiber exhaustion. In contrast, the Myopulse's microcurrent helps to return normal electrical potentials to contractile cells which, when tissue is painful, are either over-firing or under-firing, resulting either in knots, bands, and zones of tightness or areas of depletion and atrophy. "Bio-identical" sine waves at the correct frequencies can reverse and release these abnormal states in connective, contractile tissue as well as enhance the process of self-repair where there is inflammation (fasciitis) or torn and ruptured muscles, tendons and/or ligaments.

How is Treatment Given?

Gentle, biologically compatible waveforms (carrier waves) are delivered into the tissue. Two electrodes are used at a time; one with a positive, the other with a negative charge – in order to create a circuit. During the readout phase, biofeedback is revealed as an auditory tone and a digital display. These sounds and numbers reflect the degree of impedance (resistance) in the tissue between the two probes. During the stimulation phase (a button is pushed to initiate treatment), the biofeedback is received by a computerized three chip relay, utilizing a proprietary program designed to 1) receive, 2) analyze, and 3) calculate a corrective output. As the instrument sends its influence back into the tissue, it causes change to occur, moving it toward normal levels of bioelectrical charge. At first, a "dive-bomb" sound and plummeting numbers literally reveal that the cells "cannot hold a charge." Eventually, the readouts and sounds reflect improvement (a "holding pattern").

The polarity of the probes reverses every two seconds during stimulation. Moving in one direction, the carrier wave gathers feedback; moving in the other direction, it sends signals that boost or reduce abnormal levels of resistance. After each intermittent stimulation, when the readout next appears, the Operator (and the savvy Patient!) can see and hear the difference in clearer tones and higher numbers.

The Operator applies various treatment procedures, using a wide variety of probes and electrodes designed to address all types of painful, acute injuries as well as chronic, nagging conditions. From burns to scar tissue (adhesions) as well as minor sprains, strains, aches and pains; from bruises to torn tendons, issues are treated with this advanced biotechnology, producing remarkable results in the body – together with a relaxation response from the brain (Central Nervous System), in part because along with relief, hope is restored!

Transcutaneous microcurrent stimulation is completely comfortable; and the experience of the treatment is very relaxing to the nerves, frequently resulting in better sleep and calmer emotions in general. Besides helping damaged tissue to finish repairing itself, it can also serve to enhance the potential of atrophied muscles to strengthen with use. It will diminish and eventually eliminate "phantom limb pain" and help ease the adjustment to using prosthetics. Hastening the post-operative healing period, it is commonly found to produce complete recovery in more cases than without the use of these adjunctive therapeutic modalities.

Bio-feedback Regulated Technology

While there are other microcurrent devices in existence, the Acuscope-Myopulse System was the first to be introduced, back in 1978. Today, greatly refined and advanced, it is still the only self-adjusting (cybernetic) microamperage biotechnology available in health-care. Utilizing sophisticated computer chip programming, similar to a missile-guidance system, the instruments detect the state of the tissue, send signals that move towards the goal (normal, healthy readings) and self-correct until that target is reached!

Unlike an injection or oral medication, which masks the pain or clouds the emotions, this treatment procedure is enhancing our trillions of cells' natural ability to self-repair by non-invasive means until full recovery is achieved. This may take time and persistence; but the end results are lasting with no negative side-effects. In fact, one might say that a positive side-effect is calm, nerves and a brighter, more cheerful outlook. If healthy lifestyle habits are acquired, complete wellness is more quickly achieved.