

LASERS & TENS

Developing Good Techniques

Darren Starwynn, OMD, LAc

Our bodies are totally wired for energy. Every function, from digesting lunch to thinking about a big meeting tomorrow, is inextricably related to energy fields and currents in our organs, fascia and nervous system. This makes sense when you think about the trillions of cells that make up our bodies. Each of these is a bio-electric organism whose functions are based on transfer of charged molecules in its organelles and through its membranes. It has been well established in Western science for over a century that electrical activity governs most of our vital functions. This includes the electrical pacemaker that keeps the heart beating, brain waves that support consciousness and digital transmissions through our nervous system.

Microcurrent therapy has emerged as one of the most useful and versatile energy therapies, and has valuable applications for pain relief, assisted rehabilitation, non-needle acupuncture and esthetic rejuvenation services. Microcurrents are gentle enough to act in harmony with the body's own electrical activity but are a strong enough intervention to cause rapid effects that the body would not produce on its own.

Our bodies are exquisitely sensitive to subtle energies. As long as they are not overbearingly strong, the amount (intensity) of electrical currents or photons of light applied is much less important than the correct choice of treatment techniques and parameters. Let's take a look now at the principles that underlie good microcurrent and microlight techniques. There are many vital aspects of the body's response to energy that need to be understood before good treatment techniques can be selected. The most important principles are:

Resonance: The Law of Resonance concerns how vibrating energy fields interact with and influence each other. Pulse rates or frequencies of microcurrents, sound waves and wavelengths (colors) of light each resonate with various body systems and tissues.

Polarization: The Law of Polarity is a quality of all matter, including the human body. This is the positive-negative duality of all things. In my experience ignorance of how to apply positive and negative electrodes to appropriate zones on the body is probably the biggest reason for poor results and aggravations.

Resistance and Conductivity: Resistance is what slows the transmission or penetration of energy. If our skin was not significantly resistive, we would all resemble burned toast from the soup of electro-magnetic energies we are constantly swimming in. Good energy medical technique requires getting therapeutic energies through the skin's electrical barrier. This promotes circulation of energy by reducing resistance in injured or diseased tissues. A justification from manufacturers and instructors advocating the use of high-intensity electro-therapies and intense therapeutic lasers has been the need to use high energy to penetrate skin resistance. This is not usually useful for treating living things. It is well-established that acupuncture points have less resistance then surrounding tissues. Treating less resistive "open" acu-points therefore allows low-intensity or subtle energies to more efficiently enter the inner workings of the body.

"Less is More": In the world of energy medicine, smaller amounts of energy seem to promote the most profound healing results. Yoshio Manakas "X-Signal" theory is based on his extensive research in applying very low-level stimuli to acupuncture points and observing profound changes and reactions in the body. His experiences and my own confirm that lower levels of energy applied to the body frequently produce superior benefits over higher, more invasive energies.

Law of Specificity: The more specific the treatment sites, the less stimulus is needed. Applying gentle stimulation through appropriate acupuncture points, including auricular, hand and other micro-systems, produces far more powerful clinical effects that flooding larger areas of the body with high-intensity electricity and light. There are some microcurrent techniques that do involve flooding large areas but these techniques rarely deliver the dramatically rapid results with pain relief that point-specific treatments do.

Accommodation: Living systems do whatever they can to tune out repetitive, intrusive stimuli. This is the meaning of accommodation. Modulations are changing patterns of stimulation that reduce accommodation by keeping the attention of the mind/body, so to speak. Using appropriate modulations in microcurrent or other energy medical devices can extend the effectiveness of therapy.

Proprioception: This refers to the marvelous feedback system between peripheral muscles and nerves and the central nervous system. Injuries, strokes and some diseases can interfere with proprioception, causing difficulties in movement and other bodily functions. Good technique should aim to augment and help restore this feedback system back to healthy functioning. Wing and Goodheart developed valuable microcurrent techniques based on proprioception. One is the treatment of the Golgi-tendon organs in the origins and insertions of injured muscles with manual pressure and microcurrent probes.

Microcurrent Therapy and Qi: It can be said that the bio-electric principles just discussed are based in universal laws of physics and metaphysics. These govern how the body actually works in an unbroken continuum with the Earth and the universe. Treatment techniques that are not based on these principles will not deliver good, consistently effective results and may produce aggravations of pain and discomfort. I also believe that these principles are descriptions of various aspects of the movements and transformation of qi. I was trained in classical acupuncture pulse and hara (abdominal) diagnoses. According to Chinese and Japanese traditional medicine, changes in the pulse and abdomen reflect the quantity, qualities and location of qi and blood in the body. I have checked pulse positions and abdominal regions before and after application of microcurrent treatment techniques and noted the changes. The most effective techniques are those that rapidly balance the pulse and alleviate tense or weak abdominal regions.

Techniques

In the protocols that follow, I will be referring to two main forms of probe treatment - "biphasic" and "polarized." These refer to the electrical polarity orientation of the probes, an extremely important factor in producing good results. Polarity refers to which probe is negative (stimulating, putting electrical energy into the point) or positive (sedating, drawing electrical energy out of the point). Biphasic means that the polarity of the probes alternate every few seconds. Polarized means that the probes stay fixed, with one staying negative and one staying positive throughout the application of the technique.

Color Light Therapy: I have found a significant advantage to adding color light therapy to acupuncture or microcurrent treatments. Visible light represents a much higher frequency level of electro-magnetic energy than electrical stimulation or needles produce, and can evoke much more

targeted effects on organs, glands, meridians and sense organ treatments. Color therapy also often offers greatly increased responses for pain relief over acupuncture or microcurrent alone. Color light can be added to treatments as a separate step, or can be applied simultaneously through a microcurrent and color light combination probe system.

For Circling the Dragon, use two microcurrent treatment probes set to biphasic, placed close together on the body to bracket areas of localized pain. Typical treatment time per body area is one to three minutes to relieve pain, release trigger points and improve range of motion. Treatment probes with fixed polarity can be used for local and distal acupuncture point placements, including stimulation of auricular or Korean hand points. This technique can cause dramatic pain releases and is useful in meridian balancing treatments for systemic effects. The main difference between the use of these techniques is that Circling the Dragon uses probes that are close together for local treatment only, while polarized is all about local and distal placement.

Microcurrent Mu-Shu Technique: Mu, or alarm points, are diagnostic and treatment points on the front of the body. Each Mu point registers disorders of an associated organ. Shu, or associated points are on the back, on both sides of the spine, that also directly connect with associated organs. Mu and Shu points have been used both diagnostically and for treatment. Because they connect directly to organs, Mu and Shu points can provide valuable and rapid treatment of visceral disorders. When these points are treated together with polarized microcurrent it is called Mu-Shu technique. This treatment works through autonomic nervous system effectors and direct organ stimulation. One of these Mu-Shu techniques is called Reverse Body Image/Great Loops. Using polarized probes, apply the positive probe on a local area of pain, place the negative probe on a tender point on the opposite aspect of the body. For example, for shoulder pain, place + probe on shoulder and - probe on the tender point on the opposite hip.

Interferential (IF) Pad Technique: This creates a much broader stimulation pattern for large joints and body regions. Used for acute or chronic pain, neuropathy or post-exercise soreness. Interferential treatment can be applied with high (milli-amp) or low (microcurrent) treatment currents. Milli-amps are generally used for acute pain and injuries and edema, and microcurrent for subacute or chronic pain and peripheral neuropathies.

Kinetic Electrotherapy: This is another of my favorite microcurrent therapies because it is so simple and elegant, and works so well. To apply, simply place four pad electrodes around an injured or painful area, start the current flow, and then get the area in motion. This can be done by having the patient move the joint through range of motion (active motion), the practitioner move the area or use rehabilitative exercise equipment to do so (passive motion), or through bodywork such as tui na, so tai, manipulation or traction.

Root, Branch and Sequence Therapy: The term Root and Branch originated in ancient Chinese divination methods. They were eventually adopted by traditional Chinese medicine as terms to differentiate between causal and symptomatic therapies. A Root treatment is one that improves overall health or treats chronically weak organs. Branch treatments focus more on alleviating painful or distressing symptoms. A skilled acupuncturist will offer treatments as needed to address both the Root and the Branches.

Another great contribution made by Manaka, whose pioneered work with polarity agents and subtle energy acupuncture, was his Four-Step treatment system. Based on his keen understanding of the movements of qi and the "less is more" principle, he developed a system that offered the benefits of both Root and Branch treatment in the same session. This was done by performing a sequence of techniques as follows:

- Root treatment to address constitutional issues and structural imbalances with polarity agents
- Neuromuscular treatment through *yang* meridian treatments
- Applying proprioceptive Asian bodywork to correct structural imbalances
- Symptomatic treatments, usually through auricular or Korean hand micro-system points

Each of these steps directly responds to imbalances of qi. Treatment is not selected theoretically, but always through pragmatic testing and observation of the patient's body and meridian status. I have adapted Manaka's Four-Step system for use with microcurrent electro-acupuncture. I have found that applying sequences of brief treatments has been highly effective and versatile.

The current debate on redefining many aspects of health care is largely based on the realities that costs must be contained and efficiency of many treatments improved. Energy medicine offers valuable solutions for clinically effective and cost-effective care with few negative side effects. Microcurrent and light electro-acupuncture therapies are proven, practical methods to support pain relief, rehabilitation and esthetic rejuvenation. Energy therapies can also be a valuable support for healing of many internal conditions. Although qi cannot be precisely defined in the English language, it can be observed and is clearly affected by good energy therapies. The success of these techniques point to the likelihood that expanded applications of microcurrents for healing and regeneration will be developed with further work.

Resources

- 1. Nelson RM, Courrier DP. Clinical Electrotherapy. Appleton-Century-Crofts, 1987, Chapter 3
- 2. Manaka Y. Chasing the Dragon's Tail. Paradigm Publications, 1995.
- 3. Starwynn D. Microcurrent Electro-Acupuncture. Desert Heart Press, 2001.

MARCH 2010

©2024 Acupuncture Today™ All Rights Reserved