ARTICLE FOR AUGUST 30 MICROLIGHT JOURNAL
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MICROCURRENTS IN MOTION

One of the main aims of physical therapy is to increase mobility of injured muscles and joints. Whether through joint manipulation or stretching and range of motion exercizes, such intervention is often painful to the patient and its results usually of short duration. Many newer and more sophisticated methods are now available to reduce patient discomfort and increase duration of improved motion from these maneuvers. The two most noteworthy methods to accomplish these aims are use of proprioceptive bodily reactions and microcurrent stimulation.

Proprioceptive techniques involve placing an affected muscle in a position that triggers the CNS to command that muscle to increase or decrease its tone in a desired manner. These techniques fall into two categories. The first category involves active joint movements, and include techniques such as *isometric* or *resisted contractions* and *reciprocal inhibition*, in which muscle spasms are released utilizing resisted contraction of the muscle that is the antagonist to the muscle in spasm. The second category includes techniques that passively position affected muscles in a comfortable position that allows return to normal resting tonus, and includes *Strain-Counterstrain* techniques. These proprioceptive techniques utilize the body's innate system of checks and balance to facilitate structural rebalancing, and hence, healing.

One of the most effective applications of microcurrent therapy is what I call "Microcurrents in Motion". This is simply joint and muscle mobilization with simultaneous microcurrent stimulation to the area being treated, and is a wonderfully effective clinical tool. Microcurrents will usually quickly relax and reduce pain in an injured area, and hence makes any manipulation or mobilization procedure more comfortable for the patient. Many chiropractors and physical therapists have reported to me that in addition to making the patient more comfortable, these procedures also give longer carry over of increased mobility than mobilization without microcurrents. Apparently proprioceptive responses are modulated in part by subtle bio-electric direct currents in the body, and appropriate external stimulation acts as an "amplifier" or enhancer of the rebalancing process, especially in injured and compromised tissues.

Listed below are some specific applications of MIcrocurrents in Motion:

1) Placing microcurrent probes on origins and insertions of affected muscles while placing them in a stretch position.

2) Micro-interferential through the neck during cervical traction.

3) Micro-interferential through the low back during use of flexion-distraction table.

4) Microcurrent stimulation through affected muscles while performing strain-counterstrain techniques.

5) Microcurrent stimulation prior to manipulation to balance musculature.

6) Use of probes to stimulate distal acupuncture points while simultaneously asking patient to mobilize affected joints. I have found this to be especially effective with use of hand acupuncture points, such as Luozhen for impaired motion of the neck, and Ling Ku and Zong Bai for back problems.

The high rate of effectiveness of these methods, plus the increased comfort and compliance of the patient, makes traditional methods such as milliamp muscle stimulation and painful ROM exercises positively "stone age" for increasing motion in most patients!