Microcurrent Electrical Therapy Clinical Proof of Concept

Microcurrent electrical stimulation has been used or studied for many different therapeutic applications. Studies have been conducted which demonstrate the efficacy of microcurrent electrical stimulation for:

♦ Reduction in pain improvement scores with accompanying substantial reduction in serum levels of the inflammatory cytokines IL-1, IL-6, and TNF-X, and neuropeptide substance P. Beta-endorphin release and increases in serum cortisol.\(^1\)
♦ Significant pain reduction and increased range of motion in chronic back pain, fibromyalgia, cervical pain, Carpal Tunnel Syndrome, and arthritis patients.\(^1,4,6,8,20,21,23\)
♦ Reduction of pain in degenerative joint disease of the temporomandibular joint.\(^12\)
♦ Lasting reduction in myofascial pain of the head, neck and face.\(^13\)
♦ Reduction in pain and increased mobility in peritendinitis calcarea of the shoulder.\(^5,28\)
♦ Reduction in post-operative pain and edema.\(^3,10\)
♦ Reduction in healing time in soft tissue injury.\(^9,11,14,15,19,22\)
♦ Reduce in treatment and rehabilitation time and reduction in worker down time.\(^14,27\)
♦ Increasing range of motion in ankle dorsiflexion in CP.\(^2\)
♦ Increase the rate of healing in injured athletes, control pain, increase the rate of fracture repair, and treat myofascial pain and dysfunction.\(^16,24,25,26\)
♦ Reduction in pain at power-grip and lifting a weight load with pronated forearm, improvement in grip-strength in chronic lateral epicondylitis patients.\(^17\)
♦ Superiority to conventional physical therapy in number of treatments required to relieve pain, severity of side effects, total cost of treatment and patient satisfaction.\(^27\)
♦ Reduce severity of muscle damage signs and symptoms.\(^7\)


\(^5\)Wallace, L. Results of Microamp Therapy on 234 Shoulder Impingement Cases. Ohio Physical Therapy and Sports Medicine, Cleveland, OH. (To be submitted to APRA)

\(^6\)Wallace, L. Results of Microamp Therapy on 421 Patients with Lumbar Pain. Ohio Physical Therapy and Sports Medicine, Cleveland, OH USA. Submitted and accepted by the International Physical Therapy Association for presentation.


Lathrop, PH. New technology speeds healing while cutting costs. Worker’s Comp Advisor, February 1990. P. 7.


Rowley, BA; McKenna, JM; Wolcott, LE; The use of Low Level Electric Current for the Enhancement of Tissue Healing. ISA BM. 1974; 1974; 74322:111-114

