

## **M.E.N.S. -- A Revolutionary New Electrotherapy -- Part II**

### BIOCHEMICAL BATTERY RECHARGING AND THE ARNDT-SCHULZ LAW

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The electrochemical fuel for cellular metabolism is adenosine triphosphate (ATP). This is not to be confused with ATPase, the enzyme which degrades ATP. A study with important implications for clinicians interested in enhancing healing was done at the Department of Biochemistry and Orthopedic Surgery, University of Louvain, Belgium (Cheng et al., 1982). This study found that it was possible to increase tissue ATP levels by almost 500 percent with microamp stimulation, which the authors concluded was a "remarkable increase." Likewise, other factors vital to the tissue repair and regeneration were also enhanced with this stimulation, with membrane transport and protein synthesis increased by 30-50 percent.

However, if one looks at the effects of increasing the levels of stimulation up to the milliamperage levels used by most clinicians, a most interesting finding was noted: Not only did the level of all three of these vital factors fail to be enhanced above baseline control levels, they were actually retarded below baseline levels. ATP generation was actually suppressed with milliamperage. The results of this study support the hypothesis frequently cited in papers in this field, referred to as "The Arndt-Schulz Law." This theory states: "Weak stimuli increase physiological activity and very strong stimuli inhibit or abolish activity." (Dorland's Illustrated Medical Dictionary, ed. 26, 1985). Could it be that we have been shouting at the body with traditional miliamperage electrical stimulation when we would be better advised to whisper to it in the more subtle microampere language of its own endogenous bioelectric healing system? I believe so, as do a growing number of researchers and clinicians. As research evidence builds and the word spreads among practitioners, M.E.N.S. is sure to become increasingly acknowledged as a star performer in the world of physiotherapy.

#### Complement to Chiropractic

Chiropractors report that the success and ease of their adjustment methods are consistently enhanced by using M.E.N.S. either before and/or after manipulation. The treatment usually consists of 2-5 minutes of manual point stimulation followed by the possible addition of 5-10 minutes of unattended treatment with pads. This is a very time effective therapy, which is made even easier by treating right through the patient's clothing with moistened cotton swabs held in stainless steel hollow swab holders, avoiding the necessity of gowning. Rapid patient flow can be maintained using it in this way.

The impressive results M.E.N.S. adds as a clinical complement to chiropractic certainly merit the brief time it takes to administer a treatment. A number of techniques have been developed to maximize the results of M.E.N.S. These techniques include "Enhancement of Muscle Re-education" (EMR), "Golgi Tendon Organ" (GTO), and "Enhancement of Tissue Repair" (ETR). Many practitioners are starting to use a new technique which incorporates hands-on soft tissue manipulation, such as friction massage and manual trigger-point releases, utilizing fingers electrified with microcurrents. This technique is often referred to as "electromassage," and

produces excellent results with tight, contracted muscles and/or scar tissue, as well as hot or cold trigger points.

## Sports Therapy

M.E.N.S. has been featured in numerous press stories about famous athletes who have experienced its efficacy first-hand. Some of the athletes who have reported success include Magic Johnson and Michael Jordan in basketball; as well as Carl Lewis, Jackie Joyner-Kersey, Roger Kingdom, and Steve Lewis in track, all of whom were gold medalists at the 1988 Seoul Olympics. The therapists at Seoul for the U.S. team specifically requested the loan of one of Dr. Wing's M.E.N.S. instruments for use on the athletes. Professional sports teams such as the San Francisco 49ers and Seattle Seahawks football teams, the New York Mets in baseball, and seven of the eight finalists in the 1990 playoffs of the National Basketball Association, all used Dr. Wing's M.E.N.S. therapy.

## Beyond Electroanalgesia

There are many electrical stimulation devices on the market which can produce temporary electroanalgesia, also called "hyperstimulatory analgesia." These devices probably close neural gates to pain in the substantia gelatinosa of the spinal cord (Melzack and Wall, 1965), and/or stimulate the release of endorphins and enkephalins to obtain opioid type analgesia. M.E.N.S., however, with its subsensory currents, appears to be working at the local tissue level to achieve anti-inflammatory effects and speed tissue repair and healing. The pain relief it provides, as dramatic as it is, is more a beneficial side effect of the favorable physiological tissue changes it produces. Practitioners must ask themselves, with the advent of M.E.N.S., whether their aim is to mask pain or to uproot its cause. Because the answer to this question for so many chiropractors is the latter, M.E.N.S. therapy is being increasingly selected by informed practitioners as the physiotherapy modality which most fits the bill for them.

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