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Diminishing Pain: Alpha-Stim microcurrent technology treats central nervous system problems.

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Before addressing musculoskeletal deficits and injury prevention, therapists often need to tackle a formidable foe: pain.

As director of rehabilitation at a busy county hospital, I 'm always focused on helping patients achieve pain-free movement quickly and effectively. Pain can stand in the way of treatment goals. But, more importantly, it reduces patients' quality of life.

I've discovered that the Alpha-Stim® 100 microcurrent electrical therapy (MET) and Alpha-Stim cranial electrotherapy stimulation (CES) produce fast, effective and safe pain management. These devices, by Electromedical Products International, Inc. in Mineral Wells, Texas, are a central part of my treatment for several conditions, such as stress, headaches, articular and back pain.

Alpha-Stim MET uses local and central microcurrent therapy to decrease pain. This is the only prescription medical device approved by the FDA to treat the peripheral nervous system and brain. And because the brain plays the primary role in regulating pain and autonomic functions, Alpha-Stim provides an effective way to approach pain and stress management.

With this technology, therapists can choose probe or electrode applications. Probes concentrate currents, which allow therapists to treat several sites in less time. This is essential to treat widespread problems, such as rheumatoid arthritis and pain at multiple spinal levels. During application, many of our patients feel partial or complete pain relief in 2 minutes to 5 minutes.

Electrode applications are more practical for stubborn problems that require longer treatment. Treatment times vary from 10 minutes to 20 minutes, but it could take an hour to achieve the best relief. Using electrodes at .5 Hz and 100 microamperes for an hour can accelerate the healing process and provide longer pain relief. Therapists can combine other modalities, such as moist heat and cryotherapy, during these sessions to achieve better results.

Daniel L. Kirsch, PhD, DAAPM, developed Alpha-Stim MET protocols. These applications go beyond conventional e-stim protocols to treat problem areas. For example, if only one spinal segment is involved, clinicians should treat the entire back first, and then the spinal segment at various angles. Dr. Kirsch also recommends treating both body sides, such as the knees, even if only one knee generates pain.

Dr. Kirsch suggests treating patients with Alpha-Stim CES to encompass the brain. The modality also treats the peripheral and central nervous systems. In addition, studies show CES normalizes neural function, increases adenosine triphosphate up to 500 percent and increases cerebral spinal fluid levels of beta-endorphins up to 219 percent.

For the application, therapists clip electrodes to patients' ears for approximately 20 minutes. Effects include a relaxed body sensation and an alert mind. While CES is a primary therapy for anxiety, depression and insomnia, studies show that Alpha-Stim CES also relieves centrally mediated pain problems, such as fibromyalgia, reflex sympathetic dystrophy, spinal cord injuries and multiple sclerosis.

In one instance, we saw promising results with a 26-year-old woman, who had low back pain and didn't find relief from conventional physical therapy modalities. After one Alpha-Stim MET probe and CES application, she reported pain reduction, which enabled her to participate in more functional activities. Her pain dropped to 3 out of 10, from an 8. Then, we incorporated flexibility exercise and a lumbar stabilization program into therapy sessions until she was asymptomatic. She's been pain-free for six months.

It's gratifying to watch pain melt away as patients receive treatment. With this technology, we can achieve pain-free results faster and at lower costs.