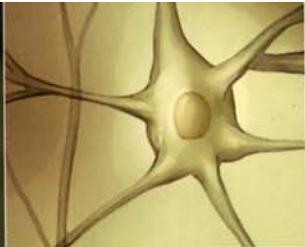


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# Rehabilitation®



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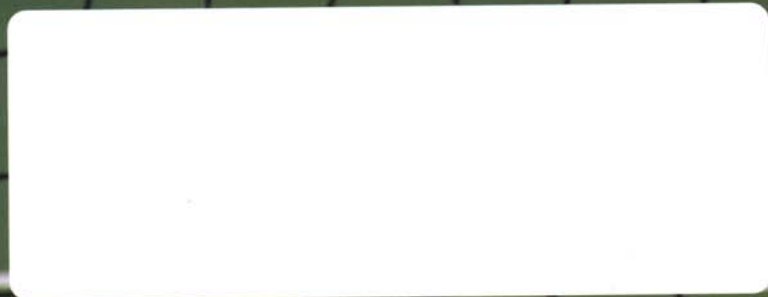
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A woman with brown hair, wearing a bright yellow tennis shirt and black shorts, is captured in a dynamic pose on a tennis court. She is holding a tennis racket and looking towards the camera with a slight smile. The background is a blurred green tennis court.

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## PRODUCTS AT WORK

# Finding Hope

Alpha-Stim® 100 may help clinicians yield better fibromyalgia treatment results.

BY STEPHEN E. PLOTNICK, MD

**A**s a rheumatologist interested in fibromyalgia (FM) for more than 10 years, I've found it challenging to help restore function and pain relief in these sufferers of widespread pain and fatigue. The complexity of FM warrants a combination of medications and interpersonal psychotherapy. Once medically stabilized, most clinicians recommend physical therapy and aerobic reconditioning.

At the September 2004 American Academy of Pain Management meeting in San Antonio, I was intrigued by a seminar about the FDA-approved modality of Alpha-Stim® microcurrent therapy and cranial electrotherapy stimulation (CES) from Electromedical Products International Inc. in Mineral Wells, Texas.

Alpha-Stim taps into endogenous microcurrent circuits in the body and brain, analogous to acupuncture. This prompts restorative effects in the nervous system. The Alpha-Stim 100 combines transcranial electrotherapy stimulation to the subcortical brain with microcurrent therapy to the body.

FM treatment targets three areas. Clinicians first try to restore sleep quality by using combinations of short-acting agents tailored to patients' needs, such as difficulties with sleep initiation, nocturia and restless legs. Second, they prescribe antidepressants, titrated to alleviate morning stiffness and fatigue—the somatic components of comorbid depression. Finally, clinicians suppress structural (often spinal) or inflammatory (arthritic) pain generators with analgesics—typically opioids and nonsteroidal anti-inflammatory agents.

While I'm impressed with the clinical progress in a majority of my patients using these three steps, patients tend to poorly tolerate medications, and sustained clinical responses are often elusive.

Adding microcurrent technology to therapy plans may help dramatically. In the last four months, my practice has trained approximately

200 patients in this modality, with a high acceptance rate. Most patients derive good to excellent benefits. The following examples illustrate these good results.

**Case #1.** A.H. is a 40-year-old disabled Medicaid recipient with fibromyalgia complicated by chronic lumbar strain, ankle osteoarthritis, depression and obstructive sleep apnea. She rated her pain and fatigue 9 out of 10 on a visual analogue scale (VAS). She also described fairly global difficulties with daily living skills and up to six hours of morning stiffness.

For spine and ankle relief, A.H. took low-dose escitalopram, celecoxib and transdermal fentanyl (Duragesic) in 150 mcg doses, every two days.

In mid-December, she received her first microcurrent treatment to the ankles, which reduced her pain rating from 10 to 6 in three minutes. Her spine pain rating plummeted from

8 to 0. A.H. found the cranial electrotherapy stimulation so relaxing she returned in two days to pay for the unit. She also showed no resistance when we reduced her opioid dose by half.

**Case #2.** C.R. is a 45-year-old man who reported widespread pain complicated by chronic lumbar strain, lumbar spinal stenosis, knee osteoarthritis and painful venous stasis edema. Treatment for his fatigue and stiffness included a combination of mood stabilizing agents, including 80 mg of ziprasidone daily and 600 mg of quetiapine at bedtime. For spine and leg pain relief, C.R. took approximately 480 mg of continuous-release oxycodone daily.

Within one week of initiating Alpha-Stim therapy to his spine and legs along with follow-up CES treatment, C.R. found his continuous-release oxycodone unnecessary and oversedating for the first time in years. Low-dose, short-acting oxycodone is now ample for liberal activity. In addition, during his initial office treatment, C.R.'s trapezius pain rating dropped from 8 to 3 on a VAS.

There's been variable acceptance regarding the safety of using opioid analgesics to treat noncancer pain. In FM patients, the risk-benefit ratio becomes even more complicated. Given

that Alpha-Stim raises serotonin and norepinephrine levels, and has a neutralizing effect on somatic pain generators, I predict this therapy will become a mainstream modality for reducing medication reliance and enhancing function in patients with FM. Combining Alpha-Stim with comprehensive physical therapy and aerobic conditioning will further the chances of treatment success. ■



**Alpha-Stim® taps into microcurrent circuits in the body and brain.**

Courtesy/Electromedical Products International Inc.

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