

healthy SOLUTIONS

Current Events

A little electric stimulation can help the body repair itself faster.

BY MATTHEW SOLAN

Forget about images of thunderbolts and Dr. Frankenstein's laboratory. No sparks fly when you're hooked up for microcurrent therapy. In fact, the treatments use such low levels of electricity you won't even feel them. And that begs an obvious question: Does it really work for healing the body?

Also known as microcurrent electrical neuromuscular stimulation, or MENS, microcurrent therapy is a painless, noninvasive procedure that uses pads or pencil-like probes to stimulate injured areas of the body with low intensity-electrical current. How low? Try a millionth of an amp. To put that in perspective, it takes one amp to light a regular 40-watt bulb.

But despite being meek and mild, MENS has an impressive track record. It works like this: The extremely low-intensity electric current stimulates cellular activity, which increases the production of ATP (adenosine triphosphate), the cell's main energy source. In the 1980s, Belgian researcher Ngok Cheng, MD, found that electrically stimulating rat skin triggered a 300 to 500 percent increase in ATP. MENS also improves protein synthesis and the cells' ability to absorb nutrients. "This all gives the body an extra 'jump start' to

create an ideal environment for better healing," says microcurrent therapist Barber Berger, LAc of San Rafael, California. "It gives the body everything it needs to more effectively do its job."

Less is more

Microcurrent therapy works in direct contrast to much of modern medicine. The Western medical philosophy has always been more is better—more medicine, more treatments—but microcurrent therapy embraces a Buddha-like approach of less is more. "Sometimes the smallest changes can have the most profound effect," says Berger. "With microcurrent, you whisper to the tissue instead of yelling at it. If you bombard the tissues with intense treatments, you just further stress them. Microcurrent simply gives the body a gentle nudge in the direction of healing."



Microcurrent therapy may help ease joint pain.

Used primarily for muscle pain management and to hasten healing of fractured bones, stressed muscles, and torn tendons, MENS has helped with arthritis, postoperative recovery, and joint and nerve repair. (Therapists have used MENS to treat other conditions,



Micro-bursts of electricity can help you recover more quickly from shoulder surgery.

such as migraines, surgical TMJ, and Lyme disease, but there's not enough evidence yet to claim positive results.)

MENS has received much press in recent years thanks to high profile athletes who rely on it to ease recurring aches and pains and to bounce back faster from twists, sprains, and other on-the-job injuries. Sports teams like the Oakland A's and the Oakland Raiders swear by it, and other big name supporters include Atlanta Braves star pitcher John Smoltz, American tennis ace Andy Roddick, and the Houston Rockets' Tracy McGrady, who recently said he finally healed his ongoing back spasms with MENS. Research tends to back up these personal endorsements. A 2004 study in the *Journal of Disability and Rehabilitation* showed that MENS increases ankle joint range of motion, and other research found the therapy greatly reduces delayed onset muscle soreness from physical activity and recuperation time from knee surgery.

Good looking

MENS has also had ongoing success in treating age-related macular degeneration, a debilitating cause of vision loss. Here, a technician typically applies the electric currents to points above and below the eye socket. A Swedish study by Edward L. Paul, OD, PhD, used microcurrent therapy on 94 eyes diagnosed

with what are considered untreatable retinal diseases, including macular degeneration. Overall, 68 percent showed a marked increase in vision function following the therapy. And a 10-year clinical study found that 78 percent of 400 eyes treated with MENS showed a one-to-nine-line improvement in reading a visual acuity chart, while 50 percent improved from two to nine lines.

Edward C. Kondrot, MD, author of *Healing the Eye the Natural Way* (Nutritional Research Press, 2000) says MENS works to treat macular degeneration in several ways: First, it boosts the cell's ability to rid itself of waste products, which is necessary for healthy activity; second, it increases blood supply to the stimulated area, which nourishes and refreshes cells and tissues; and finally, it encourages muscles to relax in the treated area, paving the way for increased nutrition and oxygenation of tissues. "In macular degeneration, the retinal cells are sick and not functioning properly," Kondrot explains. "The electric current from MENS gently wakes up the cells from sleep and stimulates the healing process."

MENS may even help you look younger. At least that's the thinking behind the newest wave of MENS—high-tech facials. A number of health spas

offer microcurrent therapy as a means to reduce inflammation around the eyes and stimulate and tone face muscles to help rejuvenate sagging skin. “As you age you lose muscle tone in your body, even around your eyes, which can cause that sagging skin look,” says Mina Bowker, a microcurrent therapist and aesthetician at Azure Day Spa and Laser Center in New York City. “Yet if you exercise, you can regain some of that lost muscle tone. The same concept applies with MENS: It ‘exercises’ the muscles in the face and helps to revive your skin texture.”

Something from nothing

Still, the question remains: If you don’t feel it, how can you be sure it works? Is there some kind of placebo effect going on? When Stanley Arcier was hiking the lush rain forest trails of Hawaii, he took a misstep that sent him tumbling into a ravine. His left shoulder was shattered. During emergency replacement surgery, doctors put steel rods into his new joint. When he returned to the San Francisco

Bay Area, a friend suggested microcurrent therapy could help ease the intense pain and accelerate the healing process.

While optimistic going into his first treatment, Arcier experienced some uncertainty about how he would react. During 10 minutes of probes feeding micro-bursts of electrical current into and around his rebuilt shoulder, he felt ... nothing. “Almost immediately thereafter, however,” he says, “I could more comfortably sense greater energy

MENS “exercises” the muscles in the face and helps to revive skin texture.

in the area and a benign feeling of increased circulation.

“After six treatments over a few weeks, 95 percent of the swelling was gone,” the 59-year-old continues. “I believe the improvement was much quicker than if I had just let it run its normal course.”

You can get MENS treatments at many acupuncture and rehabilitation therapy clinics, says Berger. “But you can’t just walk in for a treatment. You first have to get a prescription from a doctor or acupuncturist,” she says.

MENS is quick, painless, and open to just about everyone. Who shouldn’t have it? Pregnant women and those with pacemakers or people who have epilepsy, says Berger. Treatments can last anywhere from 10 to 45 minutes, and depending on your condition, the frequency of treatment may be daily, every other day, or a few times a week. You may not feel anything at first, but as Arcier and others have discovered, the results people get with MENS speak loud and clear. **AM**



Do-It-Yourself Microcurrent

It’s always better to receive MENS from a trained specialist, especially for serious ailments and injuries, but you can buy at-home microcurrent machines with a prescription from your doctor or acupuncturist to use for minor pain and discomfort, says microcurrent therapist Barbara Berger. What should you look for? The FDA does not approve devices for sale the way it approves drugs. But Berger says microcurrent instruments are regulated by the FDA under the “510 K certification,” which means the FDA has approved it for sale and it is substantially equivalent to other similar devices. So look for the 510 K label when machine shopping.

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