

## Published in *Comet* (Lagos, Nigeria), August, 2000:

### Therapeutic electromedicine... at the push of a button

There is a new device in town. It is called Alpha-Stim 100, a microcurrent stimulator. When the body breaks down from pain, stress and fatigue, the traditional approach, for some, is to visit the massage parlour for relief. But, do you know that right there in the comfort of your own home, Alpha-Stim 100 could change all that within minutes? All you have to do is simple: just strap it on and relief will flood through the painful areas. It's no magic, but pure science or rather, technological advancement.

The Comet's Adetutu Folasade-Koyi met the man who encountered it, Dr. Abayomi Aiyesimoju, of Healthville Medical Consultants, on 89, Adeniyi-Jones Avenue, Ikeja, Lagos. He writes on an amazing device:

A participant at the American College for Advancement in Medicine conference in Dallas was combing the exhibition halls, going from booth to booth in search of the laser acupuncture equipment she badly needed for the treatment of pain. She was also looking for whatever was available which could bring relief to patients with insomnia (sleeplessness) but without the side effects and other disadvantages of pharmaceutical sleeping pills.

She came across a laser acupuncture machine all right but it was fairly big in size, the cost of which was also prohibitive. She had to carry on her search. Then at a particular booth, she was shown a pocket-sized machine of which she was told that it not only treated pain and sleeplessness marvelously, but was also excellent for the management of stress and the treatment of stress-related disorders! The list of conditions that could be effectively treated by this machine, using the various accessories that come with it, she later found, included, among others, depression, attention deficit disorder, drug addiction, chronic ulcer, as well as traumatic or surgical wounds. All that in a pocket-sized portable machine that can be used at the clinic and can also be self-administered at home! the conference participant knew she had come to the end of her search.

She was going to take a couple of the machines home with her. A demonstration was soon done. The machine was set up simply pushing a few buttons here and there.

The first guinea pig was another participant, a senior colleague working in the same clinic as the participant but who found the machine and who needed to be convinced. He was hooked up to the machine by means of ear clips. Slight tingling in the ear lobes was all he first felt, then, gradually, an increasing feeling of calmness. At the end of the demonstration, which lasted for about 20 minutes, he felt profoundly calm and relaxed.

That machine is the Alpha-Stim 100, which uses microcurrent electrical therapy (MET) for those suffering from acute, chronic, or post-operative pain. Alpha-Stim 100 works with the body on a large variety of ailments, including difficult-to-treat problems. Alpha-Stim 100 treats anxiety, depression and/or insomnia with microcurrent, using a method called cranial electrotherapy stimulation (CES).

The Alpha-Stim 100 is distinct in that it is based on the concept that biophysics underlying the body's chemistry also plays a significant role in regulating pace of life's processes. The product is packaged complete with these: one set of four self-adhesive AS-Trode™ brand silver electrodes, electrode wires, two probes, ear clips, 200 felt electrodes for use with the probes and ear clips, a 15ml bottle of Alpha Conducting Solution™, a nine volt battery and an illustrated owner's manual.

How does MET work? Studies have shown that microcurrent electrical therapy can increase the quality of ATP (the molecular energy packages in the cells of the body) up to 500 times. It also enhances and normalizes the bioelectric flow in the body. Amino acid transport is enhanced and protein synthesis increased. In addition there is an effect on the productions of neurotransmitters (the chemical substances that transmits electric signal from nerve-to-nerve in the nervous system) as well as on the production of the body's own morphine-like substances that induce a feeling of well-being and lessen the sensation of pain. All these effects provide a basis for the understanding of the healing stress reducing and pain killing effects of MET.

Electromedicine on which Alpha-Stim 100 is based, that is, use of electric current in medicine is not new, but it has not always been as refined, effective and available in portable mobile form and so user friendly.



It matters not where the pain may be...

Records show that as far back as 46 A.D. the Greek physician Scribonius Largus prescribed the "seashore treatment" for patients who suffered from acute pain. For the treatment, the patient placed a foot on a species of fish which used mild electricity as defense (the electric



The handy Alpha-Stim 100



...Alpha-Stim 100 provides relief in minutes.

eel) and the other foot on wet sand thus completing the electric circuit.

19th century texts show wide use of electrical medicine - with storage batteries providing continuous or pulsating DC current. Frequency, wavelength, duration and current output were said to have been erratic at best.

There was later developed more sophisticated gadgets such as the TENS

(Transcutaneous electrical nerve stimulation), instrument which used mild electric currents to treat pain, by blocking the natural currents conveying the pain sensation with the current delivered by the instruments. these instruments however required relatively high currents, which could be uncomfortable. The treatment also had no residual effect and so the instrument had to be constantly worn. Tolerance also resulted over time similar to that of chemical analgesia (pain killers).

A further advance then came in what is now know as the MET instrument. these instruments are computerized and use microcurrent 1000 times less than that used in TENS instruments. these microcurrents are very close to the very bio-electrical microcurrents that run the body. In addition, the MET instruments produce and deliver the microcurrents at such frequencies and pulse duration that have profound long lasting cumulative effect. Treatment only need be for a brief duration at relatively long intervals.

Even the MET stimulators at the beginning were quite big and cost quite a lot. It has taken further research and development to have them in the present pocket-sized form that can be personally owned and carried about.

Dr. Daniel L. Kirsch, a neurobiologist and consultant engineers, developed the Alpha-Stim 100 in pocket-sized form for the management of stress and the treatment of pain and insomnia among other things.

[Return to Media Index](#)