

Travel Health & Wilderness Medicine

ISSUE 300!!

JULY 2008 | ISSUE #300 | \$5.95

Townsend Letter

www.townsendletter.com

Travel Strategies

Staying Healthy Away from Home

**Correct the Seasoning
A "Right-Salt" Diet**

**Vitamin D
What Doesn't It Affect?**

**Into the Wild
Hands-On Ethnobotany**

**Anti-Aging
The Dietary Supplement Solution**

The Examiner of Alternative Medicine

Case Studies with ONDAMED[®], a Pulsing Electromagnetic Field Biofeedback Device

by Shari Lieberman, PhD

Editor's Note: This article is Part 2 of a series on ONDAMED, which began in *Townsend Letter's* June 2008 issue with "The Science Supporting the Use of Pulsing Electromagnetic Field (PEMF) Therapy and ONDAMED[®]" by Jim Oschman, PhD.

ONDAMED[®] is registered as a Class II biofeedback device with the Food and Drug Administration. Practitioners and clinics worldwide are using the device. Many practitioners are providing excellent case studies that document the enormous potential of ONDAMED therapy. Additionally, many patients who have received substantial benefit from the device have opted to buy their own machine and learn how to use it themselves so that they may be able to have more frequent treatments in the comfort of their home. The purpose of the case studies' documentation below is to elucidate the potential of the device and to assist in determining the research and design of larger-scale studies.

Mallet Finger

KK is a 49-year-old woman who injured her finger when she was tucking a bedspread into a hideaway couch on November 7, 2006. She pushed her hand inside the boxspring and felt something strange when she pulled out her hand from the couch. Her ring finger on her left hand was not straight and was pointing downwards. She had no control over the finger. However, she was not experiencing great pain. The same day, she went to her general practitioner who diagnosed mallet finger. Mallet finger is a finger deformity caused when a certain tendon (the extensor tendon) is damaged.

When a ball or other object strikes the tip of the finger or thumb, the force damages the thin tendon that straightens the finger. The force of the blow may even pull away a piece of bone along with the tendon. The finger or thumb is not able to be straightened. This condition is also known as "baseball finger." Her physician immediately referred to a hand specialist the same day, whom she saw immediately. The specialist confirmed the diagnosis with an X-ray. KK's finger was put in a splint to heal for six weeks.

Approximately every two weeks, the hand specialist would measure the bend in KK's finger to see if it was improving. She received one ONDAMED treatment on November 29, 2006 during the third week of the splint. She felt a heat radiating through the finger right after the treatment that she described as almost a healing sensation. After six weeks, the splint was removed, but the finger had not improved. At diagnosis, KK had a 30° bend, and, six weeks later, she still had a 20° bend. She still could not straighten her finger. The hand specialist offered her two options: surgery or "live with it." KK read up about the surgery and realized she would be completely incapacitated for many months. So she chose to live with it. The hand specialist told KK to come back if and when she considered surgery since there was nothing more she had to offer.

One week later, she received another ONDAMED treatment on December 27, 2006 for the mallet finger. She received two treatments per week from December 27, 2006 to January 4, 2007. After each treatment, KK felt heat in the finger that would come and go throughout the day. After the last treatment, her finger

completely straightened over the course of a few days and was completely healed.

KK made another appointment with the hand specialist on January 16, 2007 to show her that the finger had completely healed and was straight. KK showed the physical therapist and the physician both hands and neither could tell which one had been the mallet finger. Both agreed that if KK had not shown them the finger, neither of them would have believed it was possible that it was straight. KK told them both about the ONDAMED treatment. The hand specialist was very open (as was the physical therapist) to the treatment. The specialist explained that she was starting to use ultrasound for treatment (previously it was only used for diagnostic purposes) and realized that there may be other modalities that could be useful. In any event, both the therapist and the specialist were extremely impressed at the results. Today, KK's finger remains perfectly normal, and she has full use of the finger and has not required any further treatment.

Lyme Disease

MN is a 35-year-old male diagnosed with Lyme disease in April 2000. A tick probably bit him when he was living in Martha's Vineyard from March to October 1998. While he never developed a rash, he slowly began to develop symptoms. They included multiple sclerosis (MS)-like symptoms including numbness to the extremities, fatigue, difficulty walking, neuropathy, memory loss, dyslexia (which he did not have previously), headaches, arthralgia, muscle atrophy, and spinal pain. These symptoms became



▶ debilitating, and he visited ten different physicians. He had various diagnoses that included MS, Amyotrophic Lateral Sclerosis (ALS), and clinical depression. He was not getting better. MN was getting worse.

In April 2000, he visited a specialist in Lyme disease who found through laboratory analysis that he was positive for Lyme disease and Ehrlichia. Over the course of three years, he received intravenous antibiotics that included Rocephin, Merrem, Zithromax, Plaquenil, Claforan, Amoxicillin, Doxycyclin, and supportive nutritional supplements. MN also received 150 hyperbaric oxygen treatments. He experienced gradual improvement to about 60% of his functioning at best. But he still had many symptoms, and whenever he went off the drugs, his symptoms became significantly worse. There was no lasting improvement. He knew that he could not stay on antibiotics forever, nor did he want to.

In May 2003, an integrative physician he had been seeing gave MN an ONDAMED treatment. He received one ONDAMED treatment each week, and within two months, his health improved to 90%. The improvement was so significant that MN bought his own machine July 2003 and continued ONDAMED treatment two to three times each week. He also stopped the antibiotics shortly after starting ONDAMED treatment. MN used patient-specific and preset modules for one year. After one year, he decreased his treatment to one to two times per week. The MS symptoms, including numbness and neuropathy, are completely gone. He is able to walk and exercise normally. His memory has significantly improved, and his headaches and dyslexia are gone. He does not have arthralgia, muscle atrophy, or spinal pain. He was unable to work from 2000-2003 and was on disability. He now works full time and travels extensively. If he overworks and pushes himself too hard or if he has days of sleep deprivation, he may feel some slight symptoms return such as mental fog and fatigue. MN will increase his usage of ONDAMED to two to three times per week or until symptoms disappear – usually within one week. He continues to live a full and active life.

Post-Traumatic Stress Disorder

GW is a 54-year-old fireman who was relocated to New York City immediately after the September 11th attacks. He worked very long shifts during the first two weeks since there was so much devastation. Shortly after beginning his tour at Ground Zero, he began to feel very angry, short-tempered, and intolerant. He also started taking everything personally and had tremendous difficulty sleeping in contrast to his normally easygoing personality and his ability to fall asleep and stay asleep easily, respectively. He expressed that working at Ground Zero was a nightmare. GW worked at Ground Zero for one year until September 2002.

Since his personality change was not dissipating, he sought professional help and, in September 2002, saw a psychologist who worked with people who had difficulty adjusting after 9-11. After a few visits, he was diagnosed with post-traumatic stress disorder (PTSD). The psychologist wanted him to take a prescription medication, but GW refused. One year later, in September 2003, he agreed to take the prescription drug Cymbalta. The drug made him feel great, but he could not tolerate the side effects. It decreased his libido and he was unable to have an orgasm. GW did not want to be dependent on the drug and also felt that it was just masking a problem he wanted to deal with it. The prescription was changed to Wellbutrin, which helped to some degree. His short temper and difficulty sleeping was not improving, and he was still experiencing nightmares.

GW started ONDAMED on March 16, 2006 since he had heard about the company's depression study and decided that biofeedback might be able to help with his stress. The psychiatrist from Westchester Medical Center, heading up the double-blind, placebo-controlled depression study with ONDAMED, approved him for the study, and GW began a course of treatment. He stopped his medication after the first treatment because he felt better and more relaxed. He was very surprised one treatment had made a difference. He received three treatments over two weeks. GW improved with each treatment. By the sixth treatment, he was no longer angry or suffering from the other PTSD symptoms. He was able to sleep better, but would still wake up after three to four hours. Upon completion of the six treatment sessions, GW was seen by the

psychiatrist for his follow-up interview on April 7, 2006. After the interview, the psychiatrist confirmed that he had received active treatment and suggested he continue with ONDAMED due to his excellent response to treatment. He continues to see the psychologist once every two weeks.

GW's sleep disturbance did not improve. He was still waking up three to four hours after falling asleep. Once he awoke, he had difficulty falling back to sleep. Since he experienced excellent results with ONDAMED, he decided to seek treatment to improve his sleep pattern. GW had his first appointment with the practitioner on September 7, 2007. He received eight treatments total from September 7, 2007 to September 24, 2007. After the third treatment, the practitioner informed him that he would feel drowsy. Instead of experiencing drowsiness, he became hyper and felt a spike of energy. That night, his sleep disturbance became worse. He had difficulty falling asleep, a symptom that he did not experience previously. After waking up several hours later, he was completely unable to fall back to sleep. These symptoms continued despite further ONDAMED treatment. Nonetheless, he decided to complete the eight treatments in the hope that it would still improve his ability to sleep. A few days after his eighth treatment, he slept seven hours straight without waking up. This was the first time he'd been able to sleep so long since he was diagnosed with PTSD in 2001. The improvement in his sleep pattern remains significantly improved. He now gets an average six to eight hours of uninterrupted sleep each night.

Iliotibial Band Syndrome and Plantar Fasciitis

SW is a 55-year-old woman who was diagnosed with iliotibial (IT) band syndrome seven years ago in May 2000. As an avid triathlon athlete, she was unable to compete in the spring of 2000 due to the pain she was experiencing. She was prescribed Vioxx by an orthopedic surgeon, and she took it on and off for several years to manage the pain. SW would experience the return of the pain as soon as she increased her mileage in preparation for a competition. The surgeon suggested that she undergo surgery to correct the problem. She refused to have surgery. Two years later, in addition to the IT band syndrome, SW

was diagnosed with plantar fasciitis in June 2002. Once again, the orthopedic surgeon recommended that she take Vioxx to manage the pain. She also iced her foot and used foot wraps as well as stretching exercises. However, the pain and inflammation always returned when she stopped the medication, especially when she increased her mileage for competition.

In September 2005, SW experienced mild to moderate depression for the first time in her life. She had heard about ONDAMED as a biofeedback device and decided to try the treatment to see if it would help her mood. After receiving one treatment in September, she immediately felt more relaxed. By the time she left the practitioner's office and got into her car to drive home, she felt in her own words as though, "a huge weight has been lifted off my shoulders." SW also felt "happier and more energy." She received a total of six sessions over the next three months due to the scheduling difficulties (holidays, travel). SW received one treatment each week for the first three weeks and then skipped several weeks between the next three sessions. After the sixth treatment, SW was completely free of depression. Consequently, after the second ONDAMED treatment, SW went for a long run and experienced absolutely no pain in her IT band or plantar. She had not experienced any IT band syndrome or plantar fasciitis since receiving the six treatments in 2005. She has trained for and competed in numerous athletic competitions. SW also noticed that her times improved in competitions such as triathlons.

SW trained extremely hard recently and competed in a half-distance Iron Man triathlon on July 7, 2007. The IT band syndrome came back during the competition, yet she was able to finish. The pain was not as intense as it had been before. The next day, she received an ONDAMED treatment, and the pain completely disappeared. She received one more treatment the following week. On August 19, 2007, SW competed in another triathlon. There was an odd depression in the road, and she twisted her foot while running. The plantar fasciitis returned, although not as intensely, and she was able to finish. She received an ONDAMED treatment the next morning, and once again, the pain completely disappeared. SW was able to complete a tough seven-mile run that evening and has not experienced

any return of pain. She has not taken any Vioxx or other pain/anti-inflammatory medication for pain or inflammation since receiving ONDAMED treatment.

Discussion

ONDAMED® combines pulsing electromagnetic field (PEMF) therapy and biofeedback for both diagnosis and therapy. The vascular autonomic signal (VAS) provides feedback on the responses of the body to specific frequencies, and the sounds emitted by the hand-held applicator and its anatomical location provide feedback during the treatment phase. In practice, biofeedback continuously informs both patient and practitioner during the diagnostic and treatment procedures. ONDAMED® has pre-programmed modules that can be used, as well as a patient-specific approach, where the pulse is felt to determine the specific frequencies best suited to the individual. The cases presented in this paper are compelling in that they clearly show that ONDAMED® played a significant role in the amelioration of these patients' symptoms.

In the case of mallet finger, KK has not required any further treatment. Her finger remains straight and healed. MN still works full time and may experience some fatigue and concentration issues when he overdoes it. He still uses ONDAMED® treatment for himself a few times per week and increases the frequency of the treatments if he starts to feel tired. MN has had blood tests for the Lyme and Erlichia, and they are confusing at best. Some show he is positive for Lyme disease; others show he is negative. He prefers to go by his symptoms, which are, for the most part, completely gone – unless he overdoes

it which may cause some very mild symptoms to return. They are completely alleviated with ONDAMED®. GW no longer experiences uncharacteristic anger or depression and does not require any medication. His initial reaction to the sleep program was the opposite of what was anticipated. Although his sleep actually became worse during treatment, GW still continued the treatment protocol. Since the last treatment, he still gets a full night's sleep each night and no longer has any sleep issues. It may be prudent to inform patients that symptoms may intensify before they get better if this continues to be observed with the individual cases. SW's case was quite unusual in that she was being treated for mild to moderate depression, not the ilotibial band syndrome or plantar fasciitis. However, once the depression lifted and she realized that for the first time in many years, she was no longer experiencing pain, the follow-up ONDAMED® treatments specifically focused on her sports injuries, which rarely if ever bother her now.

There are many more case studies that will be reported in future papers and include osteoarthritis, fibromyalgia, and traumatic brain injury, to name a few. Surprisingly, I have documented several cases of plantar fasciitis pain being completely ameliorated in just a few treatments. ONDAMED® appears to have a wide range of therapeutic action for so many diverse disorders that it appears to be a modality that would compliment and perhaps improve the outcome of many different types of practices as well.

Dr. Lieberman earned her PhD in Clinical Nutrition and Exercise Physiology from The Union Institute, Cincinnati, Ohio and her MS degree in Nutrition, Food Science, and Dietetics from New York University. She is a Certified Nutrition Specialist (CNS); a Fellow of the American College of Nutrition (FACN); a member of the American Academy of Anti-Aging Medicine (A4M); a former officer, present board member and chair of the exam committee for the Certification Board for Nutrition Specialists; and immediate past President of the American Association for Health Freedom. She is the recipient of the National Nutritional Foods Association 2003 Clinician of the Year Award and is in the *Cambridge Who's Who Registry of Executives and Professionals*. Her newest book – *The Gluten Connection* (Rodale 2007) and *Transitions Glycemic Index Food Guide* (Square 1 Publishers 2006) were just recently released. Dr. Lieberman's best-selling book *The Real Vitamin & Mineral Book* is now in its 4th Edition (Avery/Penguin Putnam, 2007). She is the author of *The Mineral Miracle* (Square 1 Publishers 2006), *User's Guide To Brain-Boosting Supplements* (Basic Health Publications, Inc., 2004), *Dare To Lose: 4 Simple Steps to a Better Body* (Avery/Penguin Putnam, 2003); *Get Off the Menopause Roller Coaster* (Avery/Penguin Putnam, 2002); *Maitake Mushroom and D-fraction* (Woodland Publishing, 2001); *Maitake King of Mushrooms* (Keats Publishing 1997) and *All About Vitamin C* (Avery Publishing Group, 1999). Dr. Lieberman is the Founding Dean of New York Chiropractic College's MS Degree in Clinical Nutrition; an industry consultant; a contributing editor to the American Medical Association's *5th Edition of Drug Evaluations*; a peer reviewer for scientific publications; a published scientific researcher and a presenter at numerous scientific conferences. Dr. Lieberman is a frequent guest on television and radio and her name is often seen in magazines as an authority on nutrition. She has been in private practice as a clinical nutritionist for more than 20 years.

