

# Multi-Modal Therapy: Microcurrent, Therapeutic essential oils and Exercise

By Darren Starwynn, O.M.D.

Remember the expression “an idea whose time has come”? That’s a good way to describe the synergy of combining microcurrent therapy with simultaneous therapeutic exercise and essential oils. Many professionals and myself have been very impressed with the results we have seen with patients with such kinetic therapies, or “microcurrents with motion”. This method is indicated for patients who are recovering after injuries, surgeries, strokes or other neurologic conditions. Applying it can be as simple as putting microcurrent pad electrodes on a patient’s affected part and instructing her to repetitively move it. We have seen rapid recoveries using this method for strains and sprains, frozen shoulder, back pain, neck pain and imbalance and significant benefits for patients with multiple sclerosis and cerebral palsy.

I used the expression “an idea whose time has come” because I recently received emails from two gifted practitioners, each of whom sent me case histories of patients having near-miraculous results using the combination of microcurrent, light and therapeutic essential oils. Simultaneous exercise was added in some cases. Hollye Kozlowski is an occupational therapist who focuses her practice mainly on helping children with neurologic deficits and diseases. She raved to me about the improved results she was seeing with her young patients since implementing this form of therapy in her practice. Victoria Bender is a psychotherapist and holistic healer from New England who treats patients suffering with depression, anxiety and other profound disturbances. She was so excited to tell me about a young girl she was able to help come back to a much more positive and empowered state after a suicide attempt - primarily using this form of combination therapy.

Before explaining how to best use these therapies together I will offer a little information about each one individually.

## **Microcurrent Therapy**

Microcurrents are electrical currents in the millionth of an amp range. Most people don’t feel much from microcurrent treatment since this range has little effect on the sensory nerve system. The great power of microcurrent therapy is based on its positive effects on the electrical network within our bodies – which affects every process within it. Brain function, heartbeat, nerve transmissions, muscle activity, glandular secretions, energy production, wound healing and even our emotions and moods are each intimately interwoven with subtle endogenous electrical currents. Acupuncture, which has stood the test of time as a highly effective system for pain relief and healing, also has demonstrable effects on the body’s electrical systems, and this accounts for much of its effectiveness.

German research has shown that low-frequency microcurrent pulses have the following healing effects:

- Spasmolysis of blood and lymph vessels & hollow organs
- Improving circulation of blood and lymph
- Tonification of elastic fibers to improve organ functions
- Reduction of inflammatory processes in the body
- Reduction of degenerative processes through promoting proper function of connective tissues
- Restoration of healthy nerve function through polarization effects
- Stimulating ATP production for muscle relaxation and healing

Because the levels of microcurrent used for therapy are of higher intensity than the body's own innate currents, yet not high enough to suppress them, it can produce very rapid relief of pain and restricted range of motion. Typically applied in the range of 25 to several hundred microamps ( $\mu$ ), microcurrent therapy can quickly boost ATP levels, improve micro-circulation, help drain lymph, relax tense muscles, improve nerve function and many other benefits.

Microcurrent therapy is applied through pad electrodes or specialized probe electrodes for treating acu-points and trigger points. When applied with proper techniques microcurrent therapy can produce positive results for several different clinical applications, including pain relief, accelerated rehabilitation and Microcurrent facial rejuvenation. When applied through appropriate acu-points microcurrents can also help heal many internal diseases.

### **Color Light Therapy**

Colors of light have been used for healing purposes for thousands of years. Over the last century there has been a great deal of scientific research to validate many of the healing effects of light. A complete explanation of these effects is beyond the scope of this article, but it is true that light therapies are now used in both mainstream and alternative medicine for many valuable effects, including the following:

- Wound healing acceleration
- Improving mood and reducing depression
- Improving learning in children and reducing attention-deficit and hyperactivity disorders
- Photodynamic cancer therapies
- Helping heal chronic infections
- Enhancing mind-body effects of acupuncture
- Improving and protecting vision
- Facial toning and lifting

Microlight therapy is a unique therapy applying simultaneous application of microcurrent and color light. Applied through special wands, Microlight combines the best effects of microcurrent and light for many of the above listed purposes and can bring about faster and longer lasting results.

## **Therapeutic essential oils**

Botanicals have been the mainstay of healing since prehistoric times. Many plants can be processed to yield oils that concentrate their healing qualities, so that just a few drops can produce powerful effects. Because botanical healing has been intensively studied for so long the science and art of essential oil therapy is highly developed.

One reason therapeutic essential oils are so valuable is that they are true mind-body medicine. Many plants yield oils that can be use for both physical and emotional healing. For examples:

Clary Sage: On the physical level this oil is valuable as an expectorant for stuffy and congested lungs, and for easing cough and bronchitis. It can also bring about mental and emotional clarity and help relieve depression, moodiness and emotional confusion.

Coriander: The oil expressed from the seeds of the coriander plant have been used effectively for relieving muscular pain, osteoarthritis and neuralgia. On the emotional level coriander oil can calm an overactive mind and help relieve nervous exhaustion.

As stated above applying diluted therapeutic essential oils to affected body regions or having the patient smell appropriate oils can boost the effects of microcurrent and improve outcomes with rehabilitative therapies. Patients can also take oils home to use as part of their self-care regime.

## **Rehabilitation**

This is the practice of guiding the patient in active or passive exercises to help him return his body to normal function as much as possible. Now that we know that all neuro-muscular activity is orchestrated by innate electrical activities, doesn't it make sense that boosting the body's currents in key areas could accelerate rehabilitation?

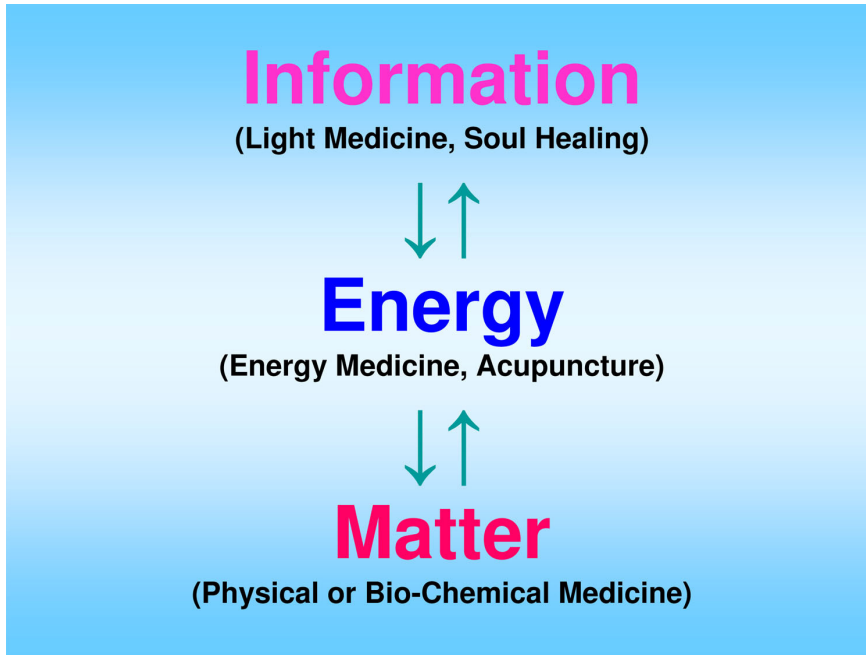
Priorioception is the body's system for regulating muscle tone and function throughout the body through central nervous system communication. There are valuable microcurrent techniques for enhancing the restoration of normal neuro-muscular activity, and these appear to work in part through the body's proprioceptive systems.

## **Combining These Therapies for Improved Outcomes**

The principle of combination energy therapies is very sound. We human beings are complex creatures with myriad influences on the physical, energetic, emotional and Soul or Spirit levels. Most Western medical systems focus on only one of these levels. Medical doctors and most chiropractors and physical or occupational therapists work primarily with correcting the physical and/or biochemical systems of the body. Acupuncturists and some holistic practitioners cross over treating both the physical and energetic levels. Psychologists work on the mental/emotional levels and most shamans and spiritual healers direct their work to the Soul levels. Could therapeutic approaches

that address and balance the person on several levels at once provide superior outcomes?

The relationship of these levels of healing can be summarized on this diagram:



The two-way arrows indicate that each level interacts with and influences the levels above and below. For example making changes in the physical body can bring about energetic and emotional shifts. In the groundbreaking book Psycho-Cybernetics plastic surgeon Maxwell Maltz described how some patients' personalities would be dramatically changed after getting facial surgery. Apparently changing their physical appearance triggered long-lasting psychological shifts. Chiropractors and therapists know that adjusting the spine or the body's neuro-muscular systems can bring about many beneficial healing responses in the organs and mental state of patients. On the other end of the spectrum healing on the emotional or spiritual levels can precipitate into profound healings of chronic pain, fatigue and depression as well as leading to spontaneous remissions of cancer.

My understanding of the remarkable results from applying simultaneous microcurrent, color light therapy, exercise and therapeutic essential oils is that all 3 levels depicted on this chart can be affected at the same time.

### **How to apply combination therapy**

There are many ways to do this, each with its own value. Here are some examples:

1. **Microcurrents with motion:** Place 4 microcurrent pad electrodes to surround a region on a patient that needs rehabilitation. This could be a low back or hip after surgery, a frozen shoulder, or neurologically-impaired arms or hands in cerebral palsy patients. Turn on microcurrent interferential therapy currents for 10 minutes duration.

While the current is flowing instruct the patient to repeat movements through range of motion of that part, gently challenging the limits of ROM each time. A diluted essential oil blend could be applied to the affected area to help relax the tissues, improve circulation and possibly improve the patient's emotional outlook and attitude.

**2. Peripheral neuropathy of the legs:** Use Microlight probe electrodes with color light to treat the spinal nerve roots of the lumbar and sacral vertebrae. Follow this with pad electrodes applied in criss-cross layout on the legs, Apply a few minutes of high stimulation followed by a longer period of healing microcurrents through the pads. This technique can be enhanced by adding acupuncture needling into sacral and foot acupoints. For best results, add diluted therapeutic essential oils to the impaired areas to improve nerve function and restore the flow of Qi energy.

Here is a touching case history from Hollye's practice:

18 mo old girl with CP: We started seeing "Amy" when she was 18 months old for occupational and physical therapy. She was receiving early intervention services in her home, but because she has left side hemiplegia, Amy's mom wanted to receive more services... Upon doing the initial eval, I found that Amy's left arm and leg were significantly involved with almost no active range of motion. Her left arm was held in a "flexor" pattern contracture (elbow bent, hand in a "fist" position with the thumb tucked under the fingers, and wrist bent. Hand held up to the chest). The muscles around her thumb were tiny and below normal in tone. I asked Amy's mom if we could try using micro-light therapy on Amy as part of our therapies. Mom agreed, so we began a weekly treatment that lasted about 10-15 minutes which included Marjoram essential oil applied directly to the arm, followed by microcurrent with red light on the extensor muscles (to increase muscle tone and strength) and blue light on the flexor muscles (to help ease the contraction state of these muscles), followed lastly by kinesio tape to help support the treatment we just did.

After the 3<sup>rd</sup> treatment, Amy began to actively move her arm at the elbow and stopped holding the arm in the "flexor" pattern. After the 6<sup>th</sup> treatment her hand was relaxed almost into a "neutral" position with fingers loose and the thumb looser. After the 9<sup>th</sup> treatment she began to actively use her left arm and hand to help "corrale" toys and items: using her left hand as a stabilizer, as fine motor skills were not yet functional. Currently, Amy has begun to grasp with the left hand and is starting to be able to use her left thumb in opposition to help hold items such as toys and writing tools, even silver ware for eating! The micro light therapy, therapeutic essential oils, and kinesio tape are all gentle. Amy enjoys her treatments, and even "helps" apply her oils and perform her micro current. This powerful form of electrical stimulation is also gentle enough for even our littlest patients!

## Summary

The challenging patients that come to us often require a multi-modal approach to give them the best possible results. Good practitioners are life-long learners who are always open to learning better ways to help their patients. It is commonly agreed that exercise is a primary means by which our bodies heal themselves after injuries and sickness. Microcurrent and color light applications can greatly enhance the beneficial effects of exercise. The addition properly selected therapeutic essential oils can add a valuable

mind-body elevation of the treatment results. A great deal of clinical experience has shown that various combinations of exercise, microcurrent and light therapies and essential oil applications can boost and accelerate recovery and healing for a wide range of patient conditions.