

The Acuscope and Myopulse were the first and only FDA approved "biofeedback" modulated micro current systems developed over 30 years ago. Since then they have gained a reputation that is unsurpassed in the pain management/ rehabilitation healthcare in both the human and equine/small animal markets.

This technology is now available in the UK with clinic in Binley Woods, Coventry. Also Advanced Equine Therapies treating horses across England.

#### The Science

There was a time when the existence of ion channels was not fully established in science. That changed in 1991. The Nobel Prize in Physiology and Medicine was awarded to two German scientists, Bert Sakmann and Erwin Neher.

Essentially, they had not only proved that ion channels exist: they also showed how significant they are to the overall well-being of the human body.

This is the basis for the treatments we provide at Advanced Healing Therapies.

#### The Equipment

The Acuscope and Myopulse are a low voltage, micro-amperage feedback modulated treatment system. The unique factor which contributes to the outstanding effectiveness of the Acuscope and Myopulse is that the instruments were designed with a proprietary "tissue monitoring" circuitry and "biofeedback" controlled voltage and current waveforms. In other words, both instruments monitor tissue impedance information which is used to carefully control the output waveform in "real time" as the treatment takes place. Utilising proprietary "carrier wave" technology, the instruments' feedback modulated microprocessors gather tissue impedance information and in turn provide a gentle current with "waveform control" that stimulate "tissue repair" at the cellular level, rather than "muscle contraction". The gentle current simply balances the environment of our body to "heal" up to 50% faster. These instruments are computer assisted, allowing for safe treatment modalities and cannot hyper stimulate or harm the patient.

The Acuscope acts upon subcutaneous tissue and neurological conditions to reduce pain and inflammation. It will also improve blood flow in circulatory-impaired tissues. The Myopulse is designed to treat connective tissue associated primarily with muscle, sports injuries, scar tissue and non-surgical facial rejuvenation (Myopulse Facial). The Acuscope and Myopulse are also effective in restoring the circadian cycles and treating stress, anxiety and sleep disorders.

A wide variety of manual hand held and placement probes have been designed and incorporated into this treatment delivery system including bipolar brass, point specific probes, with a variety of tips, dispersive roller electrodes and large and small placement electrodes for unattended therapy. Specialty probe including: Auricular, Odonton, lymph drainage, reflexology, soft tissue (facial) head band and transcranial ear clips (for head trauma, sleep and left/right brain balance) have been designed for practitioners in every field of pain management and aesthetics.

Electro-Acuscope and Myopulse treatments are below the "electro sensory" threshold, are painless and produce significant patient improvements within the first few visits. These modalities have been used by physical therapists, MD's, chiropractors, pain therapists, veterinarians, alternative medicine specialists, equine therapists, aestheticians and private individuals with outstanding success in trauma rehabilitation and "healing."

## Applications

A series of treatments has a cumulative effect, resulting in long term relief for patients suffering from the most acute and chronic neuromuscular disorders, providing an alternative means to greatly reduce common post-operative pain and swelling, treating accident and sports injuries with remarkable results, eliminating pain and increasing range of motion associated with many joint pathologies. These modalities are also indicated for chronic pain sufferers who have not responded to other forms of treatment. The Electro-Acuscope and Myopulse have built a solid reputation based on outstanding clinical results in clinics around the world for over 30 years.

## Therapeutic Explanation

The Acuscope and Myopulse are computer-based technologies that utilise a proprietary "carrier wave" that assesses the electro-potential damage of tissue. The computer makes ongoing calculations of tissue resistance and regulates the waveform micro current output to provide the best treatment, based on the information it receives. These instruments balance the tissue at the cellular level and puts the autonomic nervous system at rest, which is an environment required by the body to "heal" or repair.

## How does the Myopulse work?

A very low frequency (0.5-100 Hz.), low intensity electrical impulse (50-600 ua.) is passed into the body. This frequency and intensity is much lower than conventional "micro current" machines which function primarily as "constant current" muscle stimulators. Feedback information, about the balance and composition of the client's cell structure (electro potentials) is returned to the encrypted software, which constantly readjusts the output waveform accordingly.

## Proprietary bio-cybernetic control

The Myopulse measures the skin's resistance, internal and external cell resistance, the depth of the tissue and the polarity (electrical charge) of the cells. The system's artificial intelligence (algorithms) uses these comprehensive measurements to calibrate the waveform output, frequency, polarity and intensity of the therapeutic micro current. Specially formulated "bipolar" metal probes and nutrient rich electrolyte gels are applied to the skin during treatment. The Myopulse gives the body precisely what it needs to rebalance any excess positive ions and stimulate collagen production and cellular repair.

## Stimulates the mitochondria

Mitochondria are the central powerhouses of the cells and extract the energy from glucose to produce ATP, a chemical which is used in protein synthesis (cellular repair) and for energy storage. In simple terms, the Myopulse provides stimulation so that the body produces increased energy to repair cells and produce collagen.

## Rebalances the ion grid

The body is made up of billions of electrically charged subatomic particles called ions, which are used in the electrical reactions that happen in the body. When these ions channels are incorrectly charged, the electrical reactions lose efficiency with potentially

damaging effects on the health and wellness (including aesthetics) of the body. The Myopulse simply rebalances the environment of our body to accelerate our own ability to heal.

### Enhances blood flow and stimulates the lymphatic system

The blood transports essential nutrients and oxygen around the body. The Myopulse's ability to improve blood flow enables more essential nutrients to be transported to where they are needed and provide more oxygen to the mitochondria to improve energy production. It is also used to stimulate the lymphatic system, clearing lymphatic blockages and disposing of waste (toxins) more quickly.

#### Dehydrates and decomposes fatty tissue

Excess water stored in the fat cells plumps them out and makes them appear bigger than they are. The Myopulse along with the cellulite roller removes this water from the fat cells and breaks down fatty clusters into fatty acids, which the body can then use for energy.

#### Improve sleep and reduce stress

With the use of transcranial ear clips, the Myopulse can bring the client to meditative state within 10 minutes. This enhances any pain or aesthetic treatment for the client as the body is in a very "receptive" mode. It also helps balance the client's "circadian" cycle (sleep cycle). When we sleep properly the body has a chance to perform the cellular repair for our daily activities.

#### Acuscope and Myopulse compared to other micro current devices

All micro current instruments (except the Myopulse and Acuscope) are constant current devices, meaning that once the therapist sets up the current frequency and intensity, the current waveform and output remains constant. On the other hand, the Myopulse and Acuscope are NOT constant current devices. The current waveform and output is regulated by an additional carrier wave that is proprietary to the manufacturer. This "biofeedback" carrier wave regulates the current waveform by making thousands of calculations per second in the computer's microprocessors. In other words the current output is controlled by input of the patient's tissue being treated. It is a biofeedback device with waveform control.

The Myopulse and Acuscope technologies use special bipolar brass alloys in their probe delivery system along with special conductive electrolytes. This allows the therapist to palpate, massage and provide a balancing energy to the tissue all at the same time. The Myopulse is a low voltage device (less than 1 volt) because of the special alloys and electrolytes of the delivery system. The Myopulse 75L utilises a complex sinusoidal feedback modulated micro current waveform and is ideal for soft tissue/muscle indications, connective tissue, pain management as well as anti-aging and is an excellent start for any practice along with the sister Acuscope.

The Acuscope utilises a square current waveform (with current overshoot or spike) and focuses more on neurological issues (acupuncture, auricular therapy) as well as brain function (trauma, strokes, autism, Parkinson's, memory, etc.). Each instrument can be used by themselves or in combination.

# To book for treatments and for more information on the Electro-Myopulse and Acuscope, or for a demonstration, please contact:

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