Introducing MLS Class IV Laser Technology — Improving Care and Increasing Profits

With chronic pain affecting up to half of the UK population¹, providing new technologies that lead to better results with shorter recovery

times, is the answer for healthcare practitioners looking to improve their service. If, this same piece of technology, can improve wound healing, treat fungal nail infections without any discomfort, and improve compliance with rehabilitation, it is not only adding value to the service you provide, but also bringing in a great deal of revenue.

MLS[®] - the complete class 4 laser solution, is now present in the most prominent medical centers and hospitals in the world. Its unique technology enables concurrent treatment of pain, inflammation and swelling whilst also aiding tissue regeneration and wound healing. Easy to use technology, pre-programmed protocols and robotic systems speed workflow and enable stress free introduction of laser therapy into practice.

Follow us on Facebook and Twitter for regular updates, case studies and information regarding our free weekly CPD

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What podiatrists say

"I'm having amazing feedback from patients, often after just one treatment. For me, after 3 months use it beats shockwave hands down."

Jonathan Small, Podiatrist, Health First

Case study Adam Smith Podiatry and Healthcare

A dramatic response to laser therapy is seen in this case study of a 40 year old, fit and active female with a non-healing ulcer secondary to neuropathic pathology in her right foot. Initially seen at Adam Smith Podiatry and Healthcare ten weeks after the initially injury, having had no response to treatment from specialist nurses and doctors. The tissue was debrided, the wound offloaded, and laser treatment was commenced at week five (when MLS® laser was purchased). With twice weekly laser sessions, the wound had reduced in size by 50% after three weeks, and healed entirely by six weeks with minimal scar tissue.

Day I – ulcer, so far





Week || - 6 weeks of laser treatment

M6 – fully automated



Week 8 – 3 weeks of laser treatment



Healed with minimal scar tissue

For a free trial contact:

0800 279 9050 sales@celticsmr.co.uk www.celticsmr.co.uk CelticSMR HEALTHCARE

Providing healthcare solutions for 30 years



The Effect of a Class IV Multiwave Locked System Laser on Plantar Fasciitis

J. Geldwert DPM **R. Minara DPM**

The Center for Podiatric Care and Sports Medicine 111 East 88th Street, New York, NY 10128

- 20 patients diagnosed with plantar fasciitis
- All received 6 sessions (7 minutes per session)
- Improvement in symptoms were seen with a reduced Visual Analogue Scale score and reduced fascial thickness
- Concluded that MLS therapeutic laser was an option in the treatment of inflammatory conditions, specifically plantar fasciitis



What podiatrists say

'I was sceptical of the MLS initially, preferring shockwave, but on my first use I was blown away. My patients love it and it allows me to get patients pain free and exercising much faster than shockwave as there is absolutely no bain'

Patrick Meyer, Hands On Wellbeing

How does laser technology work?

Laser biostimulation uses light to favour and accelerate the body's natural healing processes (photobiomodulation). The wavelengths of light used in a therapeutic laser beam are able to penetrate tissue and interact with various molecules (chromophores), causing various biological effects to:

- promote tissue regeneration,
- reduce inflammation and swelling • relieve pain

On the cellular level Absorption of monochromatic, near

infrared radiation by chromophores in the mitochondrial membrane and the

subsequent effect this then has on the mitochondrial respiratory chain, including increased RNA and protein synthesis, oxygen consumption, and ATP synthesis, is a well-established theory on the mechanism of therapeutic laser^{II} . Further recent research has shown enzymatic changes within muscle cells in response to near infrared radiation, promoting myogenesis and angiogenesis, improving neuronal function, and inhibiting production of pro-inflammatory molecules^{III,VII}. In tissues this relates to increased production of collagen type 1, improvement in ECM remodelling, proliferation of myofibroblasts and modulation of the microcirculation^{IV, V, VI}.

Clinical indications

MLS[®] Laser Therapy has been proven to be effective for both acute injuries and chronic conditions, including those that have previously failed to respond to traditional treatment. Indications include:

MSK conditions – fractures, sprains, strains, osteoarthritis, plantar fasciitis, tendinopathies

Wound healing – diabetic ulcers, post-surgical wounds, traumatic wounds

Inflammatory conditions – rheumatoid arthritis, psoriatic arthritis, gout

Oedema – circulatory stasis, reduced lymphatic drainage, trauma

Neurological conditions – neuropathic pain, neuropathy

Faster response times, and therefore overall treatment times,

distinguishes MLS® Laser Therapy from traditional laser therapy with reciprocal advantages for both the operator and the patient. In most cases, six to ten applications are sufficient to obtain excellent results for acute pain and inflammation. Ten applications are typically

What podiatrists say

What podiatrists say

'The effect of MLS laser therapy [on

plantar fasciitis] was immediate - as

she had no pain'

the patient stood down from the couch

"We are a large muti-disciplined practice and having dithered over the purchase of the MLS Laser I eventually sucummed and purchased a machine. All I can say is that it has been invaluable for our clinic and has been well received by clients as it enhances treatment protocols. I wish I hadn't dithered for so long"

Shaun, Premier Clinic Ltd

recommended for chronic conditions.

The unique benefits of MLS technology

Innovative and patented Multiwave Locked System® (MLS) technology was developed in an effort to produce an efficient and simultaneous effect on pain, inflammation, and oedema, exceeding the limits of traditional class 3B laser systems whilst avoiding concerns of high-power therapy lasers, such as burning. Despite the high power output, there is absolutely no risk of tissues overheating.

What is MLS?

MLS® Laser Therapy is a unique type of Class 4 laser that utilises a unique emission system to precisely synchronise simultaneous dual wavelengths (808nm and 905nm), enabling bio stimulatory results in considerably less time compared to traditional laser therapy.

The 808nm continuous emission reduces inflammation by stimulating blood and lymphatic circulation and inducing re-absorption of fluid build-up. The 905nm pulsed emission, has an almost immediate effect on pain since it is able to induce analgesia, interfering with the very transmission of the pain impulse to the brain. By synchronizing these two emissions, MLS[®] Laser Therapy takes advantage of each wavelength's unique benefits. Thus, allowing MLS[®] to provide more effective treatment than traditional therapy lasers that follow the methodology of delivering a single emission and wavelength at a time.

Developed and tested in some of the world's leading biomedical centre and state-of-the-art health organisations, both in vitro on cellular cultures and in controlled clinical trials, MLS® ensures optimal clinical outcomes^{VIII}.

What podiatrists say

"I have invested in the laser, a really excellent piece of equipment and I want a return on that! The increased cost of treatment reflects the effectiveness and advanced technology that the laser offers. Patients are happy to pay for a treatment which has a good chance of helping them out. I have found that the cost helps them to really see the value and increases their perception of the treatment too.

Adding value to your practice

In addition to its medical benefits, MLS® Laser Therapy allows physicians to provide higher quality patient care while attracting new clients and generating additional revenue with a rapid return on investment. With MLS[®]:

- - for better medicine



MLS technology





• Expand the conditions you are able to treat - superior clinical results in both routine and specialty treatments without the use of pharmaceuticals or surgery

• Easy to use technology, pre-programmed protocols and robotic systems speed workflow and enables stress free introduction of laser therapy into your practice

Differentiate your practice - by introducing cutting-edge technology



Mphi 5 – trolley based and portable, handpiece and multi diode applicator





What else does Celtic SMR have to offer?

DIAGNOSTIC ULTRASOUND - we will get you scanning



Our range of SonoScape diagnostic ultrasound scanners provide outstanding image resolution and smooth workflow functionality, providing you with the information you need to make fast and accurate diagnosis of musculoskeletal (MSK) related injuries. Our scanners provide dynamic real-time imaging of tendon, muscle and joint structures including articulations. Extremely helpful for guiding injection therapy techniques e.g. intra articular injections and needle aspirations. Used for both diagnosis and monitoring, this imaging modality is very safe and very cost effective.

Thinking about using diagnostic Ultrasound in your **Practice...** how can you get started?

Introductory courses on diagnostic ultrasound are the best way, and Celtic SMR is here to help. We provide full technical training on any machines purchased and offer introductory education courses in collaboration with Abid AliCFPodM, MFPM RCPS(Glasg), Extended Scope Advanced MSK Practitioner and Adrian Burman Bsc (Hons), PgDip, PgCert, Advanced MSK Sonographer



MAGNETOTHERAPY – your partner in pain management and tissue recovery

Extremely low frequency pulsed (ELF) electromagnetic therapy is well documented for the treatment of pain and inflammation in MSK conditions such as fibromyalgia, osteoarthritis, as well as stimulating tissue healing in skin wounds and fractures. ASA's unique automated couch design allows treatments to be carried out automatically on the required anatomical area, whilst patients recline in comfort. Once the system is programmed, follow on treatments can be continued without direct physician

supervision, creating additional revenue.

Used in conjunction with therapeutic laser

therapy, the results are incredible.



What the patients say

'To say magnetotherapy has changed my life is a complete understatement. It has given me a future.' Charlotte, 36, diagnosed with ME and fibromyalgia

References

i Prevalence of chronic pain in the UK: a systematic review and meta-analysis of population studies. A Fayaz, P Croft, R M Langford, L J Donaldson, G T Jones. 2016. Epidemiology research vol 6, issue 6

ii Evaluation of mitochondrial respiratory chain activity in muscle healing by lowlevel laser therapy. PC Silveira, LA Silva, DB Fraga, TP Freitas, EL Streck, R Pinho. J. Photochem. Photobiol. 2009. B, BIOL. 95, 89–92

iii Effect of IR laser on myoblasts: a proteomic study. M Monici, F Cialdai, F Ranaldi, P Paoli, F Boscaro, G Moneti, A Caselli. Molecular Biosystems. 2013. Issue 6

iv LLLT improves tendon healing through increase of MMP activity and collagen

For a free trial contact:

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vii 830 nm laser irradiation induces varicosity formation, reduces mitochondrial membrane potential and blocks fast axonal flow in small and medium diameter rat dorsal root ganglion neurons: implications for the analgesic effects of 830 nm laser. Roberta T Chow et al. J Peripher Nerv Syst. 2007. Mar; I 2(1):28-39 viii Contact us for MLS laser therapy scientific report

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