

T H E N E X T

G E N E R A T I O N O F

P A I N M A N A G E M E N T

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IMPORTANCE OF MLS



The background of the entire image is a dense, overlapping pattern of white, circular pills. Each pill has a single, straight score line running diagonally across its face. The pills are arranged in a way that creates a sense of depth and texture, with some pills appearing more prominent than others.

I N D U S T R Y

I N S I G H T S

**T H E   O P I O I D   E P I D E M I C**



Also that the DEA, prior to re-licensing an opioid prescriber, require participation in an approved continuing medical education program.

The Commission endorsed further enhancements to, and enforced usage of, state Prescription Drug Monitoring Programs (PDMPs), which are electronic databases that give prescribers and pharmacists access to critical information regarding a patient's controlled substance prescription history.

Finally, the Commission has recommended revising CMS policies that encourage the prescribing of opioids, such as reimbursement based on a pain survey given to patients and unequal reimbursement for FDA-approved, non-opioid pain treatments.

As this partial summary of the forthcoming changes demonstrates, the Commission's work requires medical executives to prompt structural and cultural transformations to how hospitals administer services and physicians practice medicine.

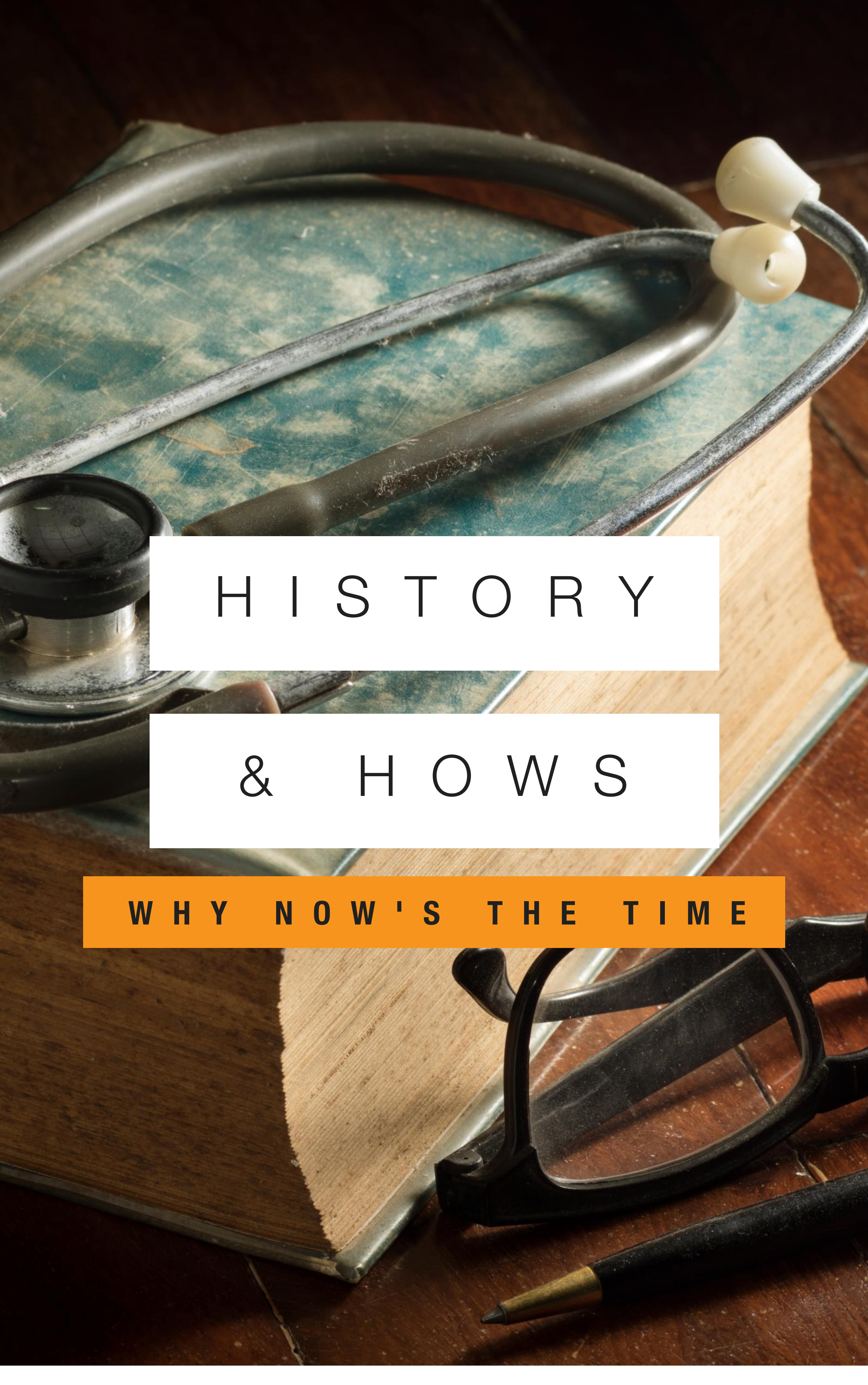
**-January 22, 2018, Industry's Need to Understand the President's Opioid Commission**

# INDUSTRY INSIGHTS

Painkiller overuse has led to the development of a national curriculum and standard of care for opioid prescribers.

The Commission has now recommended that the U.S. Department of Health and Human Services (HHS) coordinate development of a national curriculum and standard of care for opioid prescribers.





H I S T O R Y

& H O W S

W H Y N O W ' S T H E T I M E





# HISTORY & HOWS

Class IIIb lasers, commonly referred to as "Cold Lasers" emerged in 1967 and are primarily used for near surface indications. These lasers range from powers of 5mW to 500mW.

Class IV lasers, or "Hot Lasers", are 500mW + in powers and deliver ideal dosage at the greatest depth. Making them most effective in treatments. Differentiating factors between

the two classes of lasers include; Wavelength(s), Power, Emission Mode, and Dose delivery at depth. So, the big question. How does Laser Therapy work?

To put it simply, laser is light and that light is converted into energy which interacts with the tissue, inducing biological effects including the following; Analgesic, Anti-inflammatory, and Bio-stimulating effects.

Analgesic effect is essentially a relief of pain. This is due to a blocking of pain stimulus conduction, Hyperemia "wash out" of pain, and an increase in endorphin synthesis. The goal is a 50% pain reduction by the 3rd laser treatment.

Anti-inflammatory and Anti-Edema effects are due to an increase in the caliber and modulation of lymphatic and capillary vessel permeability. Also, Hyperemia and "wash out" of the pro-inflammatory molecules. Often noticeable to the patient after the first treatment with acute injury.

Bio stimulating effects result in a reduction of scar tissue formation. This is because of



a multitude of factors including; an increase in the supply of nutrients, oxygen and growth factors (thanks to vasodilatation), cellular function activation, modulation of cell proliferation and differentiation (e.g. nerve regeneration), and finally, an increase of matrix protein synthesis.

So in conclusion, MLS Laser Therapy now provides all the benefits of both "Hot" and "Cold" laser technologies. Harboring the most results with the least amount of risk!

## WHY NOW'S THE TIME

- **LASERS WERE FDA APPROVED IN 2002**
- **CLINICAL INDICATIONS ARE VIRTUALLY UNLIMITED**
- **ESTABLISHED SAFETY PROFILES**
- **PATIENTS ARE ASKING FOR THEM!**
- **PROVIDES AN ALTERNATIVE TO OPIOIDS**
- **INTERNAL MARKETING IS SUFFICIENT FOR ROI**





T E C H N O L O G Y

A D V A N C E S

H I G H P O W E R E D C O L D  
L A S E R R E L E A S E D



high powered "Cold Lasers" on the market! Providing patented simultaneous and synchronized dual wave length delivery through 808 and 905 nm and 25 watt super-pulse power.

This results in shorter treatment times, deeper penetration with significantly improved results, and treats inflammation/Edema.

Patients receive all the benefits of a "Hot Laser", and there is NO chance of thermal damage!

The results seen from this technology make almost all patients good candidates. It is a great, pain free, alternative to cortisone shots.

MLS Laser Therapy is a holistic and homeopathic solution, and a way for patients to return to normal activities faster, since there is less pain and swelling. Not to mention the potential to actually heal tissue!

The most exciting part of the new technologies isn't the bells and whistles of the machines themselves (even though they are impressive), but rather the factual, clinically verified results seen from patients treated in clinical studies.

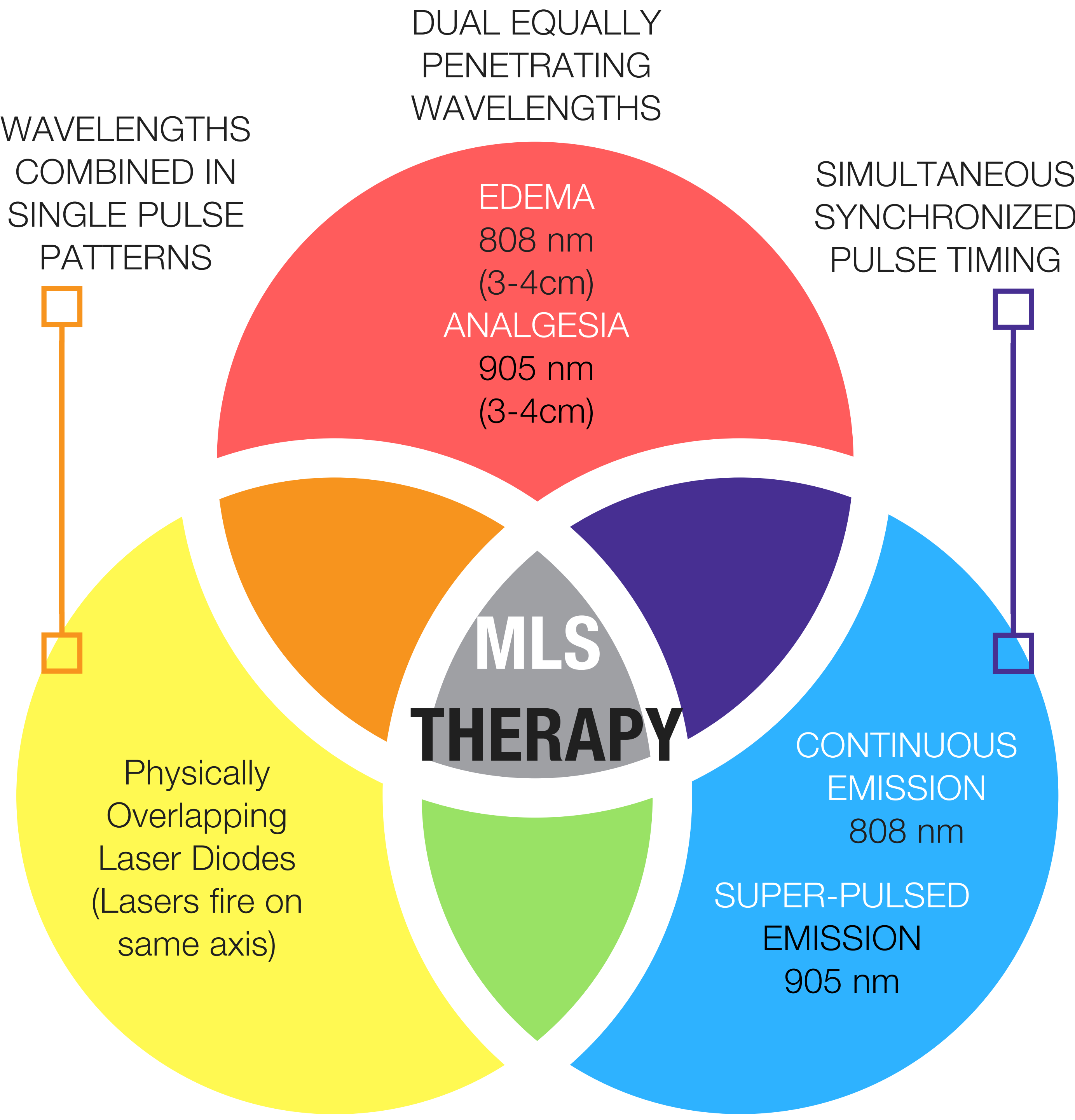
## TECHNOLOGY ADVANCES

MLS Laser Therapy continues its advancement in the medical world by providing the newest generation of class IV technology.

Class IV lasers are given the nick-name of "Hot Lasers" due to the possible thermal damage associated with higher power output. However, the latest MLS lasers soothe hot into cold. The new generation of class IV technology are the only



# LATEST GENERATION OF LASER THERAPY (MLS)







C L I N I C A L

S T U D I E S

S U M M A R Y & R E S U L T S



# CLINICAL VALIDATION STUDIES SUMMARY

## IN VITRO STUDIES

### **PADUA UNIVERSITY (Italy)**

The combination of the MLS Pulse emissions is able to induce a dose-independent stimulation of HeLA cultured cells.



## IN VITRO STUDIES

### **TURIN UNIVERSITY (Italy) - SAN PAULO UNIVERSITY (Brazil)** **Italian Ministry for the Instruction, University, and Research.**

The combination of the MLS Pulse emissions is able to induce a dose-independent stimulation of HeLA cultured cells.



## CLINICAL STUDIES

### **CHRONIC LUMBAGO (30 PATIENTS)**

#### **Padua University, Orthopedic Rehabilitation Service**

High effectiveness of MLS Therapy in treating the pathology.

### **CERVICAL DISTORTION (20 PATIENTS)**

#### **CeMuRNI Padua University**

The specific MLS synchronization assures a greater therapeutic effectiveness with respect to the combined emission only.

### **VARIOUS OSTEO/MUSCULAR TENDINOUS PATHOLOGIES**

#### **Laser Centre - Cartigliano, Italy (128 PATIENTS)**

MLS Therapy is effective to treat shoulder pain, lumbago, Lumbosciatica, carpal or metatarsal tunnel syndrome and tension headache.

### **CERVICAL DISTORTION (72 PATIENTS)**

#### **CeMuRNI Padua University**

MLS Therapy, applied as a monotherapy, shows greater effectiveness than the traditional contact laser therapy.



# CASE REPORT:

## INFLUENCE OF LOW-LEVEL LASER ON PAIN AND INFLAMMATION IN TYPE 2 DIABETES MELLITUS WITH DIABETIC DERMOPATHY.

J Cosmet Laser Ther. 2017 Oct;19(6):360-363. doi: 10.1080/14764172.2017.1326611. Epub 2017 May 11.

### **Influence of low-level laser on pain and inflammation in type 2 diabetes mellitus with diabetic dermopathy - A case report.**

Authors:

Hazari A1, K N S1, K Rao K1, G Maiya A1.

Abstract:

Numerous skin lesions have been commonly observed in individuals with diabetes mellitus. The common skin manifestations of diabetes mellitus are erythrasma, xanthomatosis, xanthelasma, phycomycetes and cutaneous infections like furunculosis, candidiasis, carbuncle, dermatophytosis, etc. Diabetic dermopathy is the most common skin lesion found in patients with diabetes. It is typically seen in men aged above 50 years. In low-level laser therapy (LLLT), the entire lower limb was illuminated with the frequency of 20 Hz and wavelength of 830 nm for 9 min, and the treatment was divided into four parts. With the continued sessions of LLLT, the skin manifestations and neuropathy conditions improved drastically. On the 21st day, the skin colour was found to be normal. Also, there were significant changes in clinical findings for diabetic peripheral neuropathy. LLLT with specific exercises can promote healing of skin manifestations in individuals with type 2 diabetes mellitus. It can be used as an effective treatment modality for treating diabetic dermopathy.



# T R E A T M E N T

## W H A T   C A N   L A S E R S B E   U S E D   F O R



A hand holding a blue pen is positioned over a medical form on a blue clipboard. The form is titled "ADOLESCENT PATIENT" and contains various sections for patient information, including "Patient ID", "Date of Birth", "Sex", "Race", "Ethnicity", "Address", "Phone Numbers", "Email", and "Medical History". The "Medical History" section includes checkboxes for "Allergic", "Neurological", "Back/Pain", "Mental", "Physical", "Developmental", "Behavioral", "Social", "Family", and "Other". The form also includes a section for "Explain (attach addendum, if needed)" and a section for "Dietary Restrictions".



Below is a list of common MLS Laser Therapy indications:

- **TENDON INJURIES**
- **LIGAMENT INJURIES**
- **SOFT TISSUE INJURIES**
- **STRAINS & TEARS**
- **SORE MUSCLES & JOINTS**
- **DEGENERATIVE JOINT CONDITIONS**
- **RAYNAUD'S**
- **DPN**
- **POST OPERATION**
- **ARTHRITIS**
- **NERVE REGENERATION**
- **WOUND HEALING**
- **REPETITIVE STRESS INJURIES**
- **TENDONITIS**
- **OSTEOARTHRITIS**
- **DEEP EDEMA**
- **FIBROMYALGIA**
- **NEUROMAS**

## TREATMENT PARAMETERS

MLS Laser treatment typically ranges from 6 to 10 total office visits. Each treatment ranges from 5-10 minutes.

It is a synchronized emission mode. Meaning a continuous 808nm wavelength (anti-inflammatory), and a super-pulsed 905nm wavelength (analgesic).

Treatment delivers 3.00 - 9.00 J/cm<sup>2</sup> with a demonstrated efficacy of 75-90%.



MLS Laser Therapy has a positive effect on cells and tissues. Research has shown cells that undergo MLS Laser Therapy treatments increase in ATP synthesis, production of RNA, cellular proliferation, and production of molecules of the extracellular matrix. There is also the induction of differentiation processes and the release of growth factors (fibroblasts) and

other substances. MLS Laser treatment typically ranges from 6 to 10 total office visits. Each treatment from 5-10 minutes, a synchronized emission mode. Meaning a continuous 808nm wavelength (anti-inflammatory), and a super-pulsed 905nm wavelength (analgesic). Treatment delivers 3.00 - 9.00 J/cm<sup>2</sup> with a demonstrated efficacy of 75-90%.

## OVER 116 MILLION PEOPLE SUFFER FROM CHRONIC PAIN IN AMERICA ALONE.

DPN, or Diabetic Peripheral Neuropathy, is by far the most common chronic pain syndrome seen in patients these days. Managing patients with DPN can be a struggle because it is not easily controlled.

However, MLS Laser Therapy provides a unique treatment opportunity for these patients. Laser therapy can lead to interruption of the casual pathway leading to ulceration, infection, and amputation.

Not only this, but tissue treated with laser therapy can result in positive outcomes as well...

MLS Laser Therapy & Tissue:

- **MODULATION OF INFLAMMATORY PROCESSES**
- **REMODELING OF EXTRACELLULAR MATRIX**
- **INDUCTION OF LYMPHATIC AND VASCULAR REGENERATION**
- **STIMULATION OF ENDOTHELIAL FUNCTION**
- **REDUCTION OF EDEMA RE-ABSORPTION TIMES**
- **PREVENTION AGAINST FORMATION OF SCAR TISSUE AND HYPERKERATOSIS**



# POST SURGERY ULNAR NERVE REGENERATION

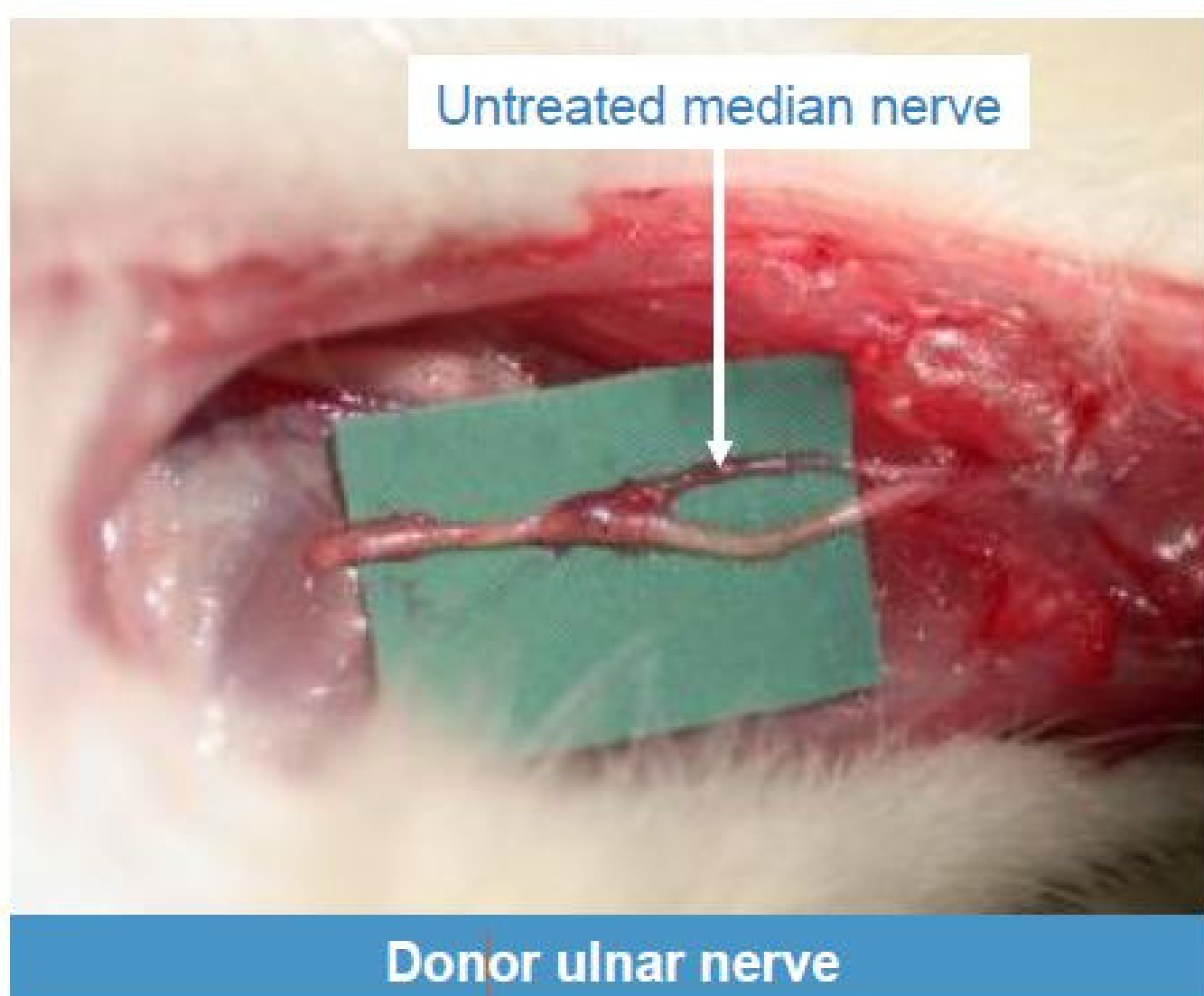
To investigate the effects of laser therapy on postoperative nerve regeneration, a randomized double blind, RCT study was conducted by D.P.M. Andrew Rader.

Nine treatments were issued over the course of three weeks. The nerve conduction measured pre and post treatment show significant functional improvement.

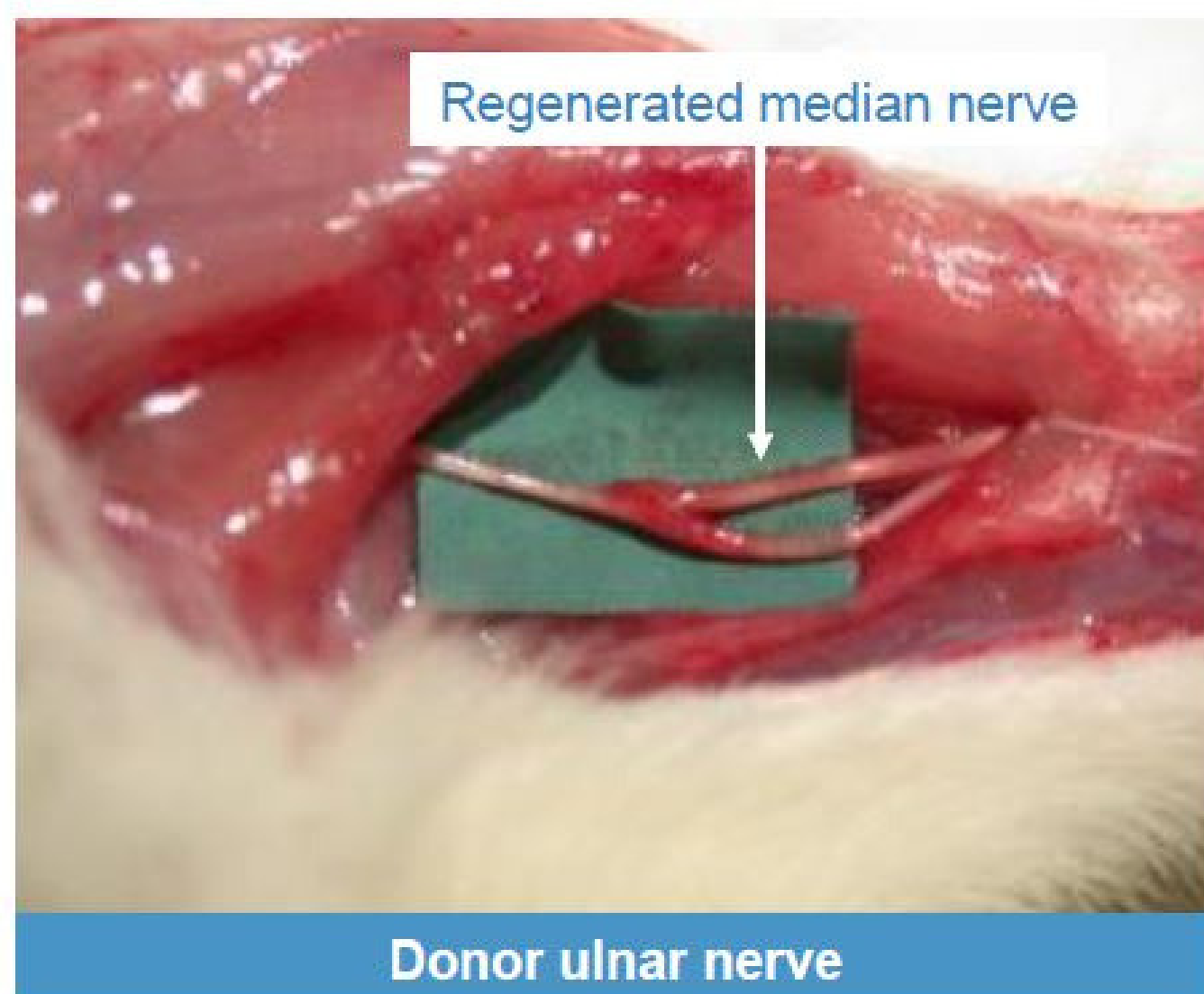
Peroneal Fc improved from 8.99ms to 6.19ms ( $p=.015$ ).  
The Tibial Fc improved from 10.30ms to 6.97ms ( $p=.001$ ).

The conclusion from the study is that MLS Laser Therapy applied to the tibial and peroneal nerves in persons with documented DPN will lead to objective improvement in nerve function as demonstrated by NCS evaluation.

## LASER THERAPY DELIVERED 3X PER WEEK FOR 16 WEEKS:



Untreated



Treated with MLS





P A T I E N T S &

P R A C T I C E

I M P O R T A N C E O F M L S



# WHY IS LASER THERAPY IMPORTANT FOR YOUR PRACTICE?

As insurance reimbursement levels shrivel and the opioid stigma continues to worsen, many practices are finding laser therapy to not only provide an additional flow of revenue to the business, but also a new, effective, alternative to pain medication.

Patients receive effective treatment for often difficult diagnoses and additional conservative care modality prior to surgery. Many patients prefer a "modern medicine" option of treatment as an alternative to Rx opioids, cortisone shots, or surgery.

Not only do a good majority of patients prefer laser, but it can be a huge time saver in the office! Especially now that some models offer unattended robotic delivery of treatments! On average, 4.6 hours out of the week are lost in practices due to a pain management condition, can you relate?

Patient fees are specific to the practice, making it easy for you to alter it into a productive and proactive treatment system for your business and patients. Patients want solutions. Trusting you as their doctor, if you believe - so will they.

## CUTTING EDGE LASER TECHNOLOGY

Since our founding in 2001, our mission has remained the same; to provide high value medical equipment to healthcare professionals that will improve the quality of medicine practiced while improving their bottom line. We serve over 4,500 medical professionals in niche markets including but not limited to Orthopedics, Podiatry, Chiropractic, Pain Management, Veterinary and Professional Sports Teams.

**BETTER MEDICINE.**  
**BETTER BUSINESS.**



eBook Provided Courtesy of



For more information about how MLS Laser Therapy can transform your practice, give us a call at 800-889-4184 to schedule your complimentary in-office laser demonstration. Click here for more information:

[MLS Laser Therapy](#)