

# MLS LASER THERAPY

## KEEPING HORSES ON THEIR HOOVES

### MLS LASER THERAPY IS YOUR NEW PARTNER IN REHABILITATION

BY GRACE HUETHER, CUTTING EDGE LASER TECHNOLOGIES

Over the last couple of years, the use of laser therapy has expanded within the veterinary field. Laser therapy has found success in a variety of veterinary settings while also treating a wide range of species from companion animals to equine and other species in between. Laser therapy can relieve pain and inflammation for a variety of conditions and accelerate post-surgical healing. Laser therapy is helping animals get back to their normal selves quicker, improving their lives and easing owners' worries.

Lasers are regulated and classified by the Food and Drug Administration (FDA). The FDA places both medical and nonmedical lasers into four major hazard classes and three subclasses based upon ability to cause biological harm. The lower the class, the lower the potential for biological harm. Most therapeutic lasers fit within Class IIIB and Class IV. Class IIIB lasers have lower power, require longer treatment times over many sessions, and offer limited biostimulation.

Class IV therapy lasers were developed with the idea that higher power would lead to better and more efficient results. However, with a higher power output there is a higher risk of thermal damage to tissue. Therefore, ASA Laser, distributed by Cutting Edge and Patterson Veterinary, developed the Multiwave Locked System (MLS) Therapy Laser emission system. The MLS Therapy Laser allows patients and practitioners to experience benefits of a Class IV therapy laser in a shorter span of time while reducing the risks associated with most Class IV lasers.

#### **MORE THAN THREE DECADES OF EXPERIENCE**

For over three decades, ASA Laser has focused on providing noninvasive and nonpharmacological solutions for wound healing, pain management and tissue regeneration. Based in Vicenza, Italy, ASA has become the international point of reference for laser therapy for multidisciplinary use.

Unlike early-generation Class IV lasers, MLS laser therapy has the capability to deliver controlled laser energy, providing a more accurate therapeutic dose delivery, leading to consistent and repeatable results.

With the unique safety feature of controlled laser energy, MLS laser therapy can penetrate three to five centimeters into the tissue, stimulating the biological response, efficiently reducing pain and inflammation without generating heat.

#### **THE TECHNOLOGY BUILT INTO THE MLS**

MLS laser therapy uses non-ionizing electromagnetic radiation to increase ATP production and cellular growth, block pain signals and stimulate cells to remove toxins, resulting in eased pain and inflammation. Photons of light penetrate the tissue, accelerating cellular reproduction and growth to repair damaged cells and form new capillaries in damaged tissue.

The MLS emission system combines and synchronizes two therapeutic wavelengths. The continuous 808 nm wavelength decreases inflammation by stimulating blood flow and lymphatic drainage of swollen areas. The super-pulsed 905 nm wavelength works to reduce pain, producing a high level of pain-killing hormones such as endorphins and enkephalin to block the transmission of painful sensations to the brain.

When synchronized, the 905 nm and 808 nm wavelength emissions reinforce each to achieve results greater than what could be accomplished if the wavelengths were not synchronized in this fashion.

#### **THERAPEUTIC BENEFITS: A LOOK AT THE NUMBERS**

Many animal owners are beginning to favor more natural and holistic treatment methods for themselves and their animals. MLS laser therapy provides veterinary practices with a new tool to help adapt to these preferences, improve quality of care and differentiate their practice.

MLS laser therapy can decrease healing time by 30% to 40%, helping animals return to normal activities faster than traditional therapies.

MLS laser therapy has an 85% to 90% efficacy rate in relieving pain

#### **THERAPEUTIC BENEFITS OF MLS LASER THERAPY:**

- ▶ **30 to 40% decrease in healing time**, helping animals return to normal activities faster than traditional therapies.
- ▶ **85% to 90% efficacy rate** in relieving pain and inflammation.

and inflammation. With high levels of consistency, efficacy and safety, MLS laser therapy can help relieve pain and restore quality of life.

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## MULTIPLE USES OF MLS LASER THERAPY

MLS laser therapy can treat various species and conditions, including horses. It is often used in rehabilitation, with a point-to-point or scanning method, delivering consistent and repeatable results.

Dr. Nancy Peterson practices in Iowa and discusses how MLS laser therapy has helped her patients: “The new MLS laser therapy has been a great addition to our new rehabilitation center.

It allows us to safely use this modality in orthopedic cases without the concern of metal implants, treat degenerative joint disease, trauma and many other therapies including acupuncture for those patients not tolerating the needles. We no longer have to keep the laser constantly moving, which is very nice for our more energetic patients.”

Dr. Nathan Jurgena, who practices in Illinois, has had a similar experience, saying his MLS

Therapy Laser has “far more uses” than the previous system his practice used. He emphasizes the impact on patients. “We are able to use it on live tissue on our post-surgical patients. This is particularly helpful for our orthopedic cases.”

“The new system is wonderful for our new rehabilitation center. It allows us to add a more thorough treatment to patients with degenerative joint disease, trauma rehab and many other different therapies,” Jurgena added.

## TREATS A WIDE VARIETY OF CONDITIONS

The MLS Therapy Laser’s interchangeable probe tips expand capabilities and conditions that can be treated. With intraoral and acupuncture tips, treatment is not limited to musculoskeletal or dermatological conditions, though it is recommended that only certified acupuncturists use the acupuncture function. (Refer to the MLS Therapy Laser acupuncture guide for more information.)

The choice between small and large probes allows for greater versatility and efficiency in treating a variety of species and condition types.

“The different head options have made it possible to complete the laser therapy sessions accurately and in a shorter period of time,” says Peterson.



***“The portable system makes it very simple to move from surgery to the intensive care unit.***

***We no longer have to tote a whole table and heavy system. We even have the option to do house calls if needed because the new system is portable and has great battery life.”***

## RODNEY THE QUARTER HORSE: A CASE STUDY

Dr. Tony Levine of Ironton Animal Hospital examined a 17-year-old Quarter Horse gelding named Rodney who was used for barrel racing three to four times per month. Over a few months Rodney developed gradual lameness on the front end.

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*“In the four months that we have had the laser, we have recovered 81% of the cost of the unit in revenue. Purchasing this laser has enabled us to provide a variety of services to our clients that are exclusive to the area and has provided elevated care for many of our patients.”*

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Owners rested Rodney and gave him one gram of phenylbutazone twice a day for one week with little improvement. An exam showed a grade two-sixths lameness at the walk and trot on front right and a grade one-sixth lameness on left front. Further examination of the right fetlock showed swelling in the joint and a 75% decrease in range of motion.

MLS laser therapy treatment was prescribed twice a week for a total of five treatments at 375 J for 11 minutes and 45 seconds in the right fetlock. After five treatments Rodney had 90% range of motion of the right fetlock.

### **MORE OPTIONS THAN EVER**

MLS technology has been adapted into multiple laser systems for veterinary use including the EVO and M-VET.

The EVO uses MLS technology with peak power of 75 W to produce an analgesic response, targeting an area of 2 cm in diameter with the handpiece and 5 cm with the ULTRA head. The EVO has over 80 preset protocols including equine protocols. The preset protocols can be modified for personalized treatments. The EVO also has interchangeable acupuncture and intraoral tips.

The M-VET delivers the patented MLS emission through optical fiber technology, allowing higher intensity energy to be delivered into the tissue in total safety. The M-VET has a peak power of 270 W and has four interchangeable lenses. There are also customizable preset protocols for equine use with the ability to log 500 patient profiles on the device and export the profiles via USB.

### **USE IT WHEREVER YOU ARE**

Various MLS laser therapy devices are portable, allowing for greater flexibility. The M-VET cart and optional rolling cart for the EVO make the devices easy to move, increasing efficiency.

Peterson comments on the portability of the MLS system, saying “The portability of this system has been great as we utilize it in surgery, exam rooms as well as our new rehabilitation area. The staff enjoys the ease of moving it from one area to another.”

Jurgena has also experienced the ease of the portable system: “The portable system makes it very simple to move from surgery to the intensive care unit. We no longer have to tote a whole table and heavy system. We even have the option to do house calls if needed because the new system is portable and has great battery life.”

## **COMMONLY TREATED CONDITIONS**

Conditions in horses that have been treated with MLS laser therapy include:

- ▶ hoof bruises
- ▶ tendon tear
- ▶ bite wounds
- ▶ synovitis
- ▶ tenosynovitis
- ▶ degenerative joint disease
- ▶ stifle injuries
- ▶ osteoarthritis
- ▶ hock injuries
- ▶ chronic edema and fibrosis
- ▶ chronic and acute phlebitis and more

## **FINANCIAL BENEFITS**

Hospital Manager Rebecca Caudle of Macedon Veterinary Care in Macedon, New York, talked about the positive financial impact of the MLS Therapy Laser. “In the four months that we have had the laser, we have recovered 81% of the cost of the unit in revenue. Purchasing this laser has enabled us to provide a variety of services to our clients that are exclusive to the area and has provided elevated care for many of our patients.”

By offering financial and medical benefits, MLS laser therapy provides veterinary practices with an opportunity to meet client demands and improve quality of care with an innovative technological solution, accelerating recoveries while strengthening their bottom line. With high levels of consistency, efficacy and safety, MLS laser therapy can help relieve pain and inflammation, restoring quality of life. ■