

For the past 30 years Low Level Laser Therapy has been researched and available in the medical field for the treatment of pain, wound healing, musculoskeletal conditions and as an alternative to needles in acupuncture.



"Laser has enhanced my practice by allowing me to offer an aseptic, painless and non-invasive alternative to conventional acupuncture needles for animal treatment - I would not be without it."

**Janet Lloyd-Jones
MBAC MBMLA**

The same physiological effects are utilised in animal laser therapy to provide a safe and effective way to improve the healing of:

- o Wounds
- o Soft Tissue Injuries
- o Tendons and Ligaments
- o Muscle problems
- o Fractures

Treating with Laser

Treatment is quick, pain-free, easy to apply and effective. Appropriate probes are placed on the skin relative to the damaged area and controlled light of a specific wavelength, power, pulsing frequency and duration, is passed

into the tissue.

"I use my Omega laser all the time—it works wonders when it comes to wound-healing in particular."

**Terry Girling,
BSc BVetMed MRCVS**

Laser therapy is especially effective for chronic conditions, infection, non-healing wounds or where the animal's immune system is compromised. Response is quick, with the treatment times per

session relatively short. Depending on the condition, laser therapy is given once or twice weekly, followed by progressively longer treatment intervals as symptoms ease. During treatment most animals will be seen to relax.

How does it work?

Different wavelengths and pulsing frequencies of light are used to stimulate the cells involved in the body's own healing processes. Initial absorption by mitochondria initiates this leading to increased fibroblast proliferation and migration, with modulation of cytokine levels, growth factors, inflammatory mediators and increased oxygenation - all part of the natural healing process.



Treating for an injured back

"I use my laser more than any other piece of electrotherapy equipment—there are so many horses and treatments I could talk about it would take me a week!"

**Angie O'Brien,
Shadwell Stud**

In addition to local cellular effects, laser therapy also enhances the level of endorphin release which, together with its capacity to suppress c-fibre activity, can be successfully used in the management of pain. Finally the capability to stimulate acupuncture points allows treatment of the full range of conditions which can be addressed by acupuncture.

Optimal Wound Healing

Vets report that the use of low level laser makes a real difference in both the speed and quality of wound-healing, particularly where the healing is delayed. It performs well in reducing oedema and aids collagen alignment often resulting in better cosmetic appearance.



Post-surgery LLLT and Laser acupuncture were used to stimulate bone growth and improve wound healing in Barnaby's fractured hind leg

Laser can initiate the healing process where stalled, whether wounds or chronic injuries are involved. LLLT is also excellent when addressing skin conditions and for dental treatments and mouth infections in small animals.

Calming Pain Relief

Low level laser therapy can relieve pain for all manner of conditions, from arthritic joints in cats to mud-fever in horses. In human research it has been shown to increase endorphin release and the resultant calming feel-good effects can be equally useful in animals who often relax even to the extent of falling asleep during treatment. Sensitive birds such as the stressed and feather-plucking parrot above can be soothed mentally as well as physically.



Mud-fever case on day 1; after a month of treatment; then at 3 months.

Other avian conditions which respond well to treatment include bumblefoot and the non-healing of jess injuries in birds of prey.



Fresh Injury



After 2 weeks with laser treatment

Soft Tissue Injuries

Whether the damage is to muscle, tendon, ligament or other soft tissue, laser therapy can speed up and improve the resolution. As concluded by McKibbin and Parschak in

"...particularly valuable... in the treatment of cruciate ligament injury in the dog It can act as an alternative to surgery in many cases."

Alternative Veterinary Medicine Website

their published study on the subject: "Lasering bowed tendons presents a safe and less expensive alternative to traditional methods which often require a year layoff for the horse."

It is also used to great effect on muscle spasms and for easing general muscle and joint stiffness whether due to heavy exercise or just wear and tear.

Faster Recovery

Laser therapy optimizes the rate and quality of healing meaning faster recovery for all and importantly shorter lay-offs for working and competition animals. Being drug-free also has the added benefit when treating competitive

"I must say that I am really impressed at the level of improvement the laser is having on a serious bowed and damaged tendon with one of the horses ."

**John Lennon,
Racehorse trainer, Co Wicklow**

animals that under current horse and dog racing rules laser therapy can be used safely, effectively and legally - even on the day of competition.





Haemophilic black Labrador with large haematoma which was rapidly disbursed with laser treatment thus avoiding surgery with attendant dangers

Advantages

Laser therapy can be used independently, in conjunction with conventional veterinary practices, or effectively alongside other complementary therapies. It is:

- o **Safe**
- o **Non-invasive**
- o **Painless**
- o **Versatile**
- o **Side-effect free**

Ideal when treating very young, old or otherwise nervous animals, laser is uniquely suited for treating over trigger points, ash acupuncture points and other areas of pain or sensitivity. An advantage of laser therapy is that it is drug free - particularly useful where

drugs are contra-indicated or where an animal is drug-resistant. In addition, unlike certain other electrotherapies, treatment can also safely be given over pins or plates.

Equipment

The **Omega Xp Mobile** is designed especially to be practical, light and portable. It incorporates a 'multi-pulse' function that makes for ease of use and which is designed to avoid cellular accommodation. A point finder facility is also included in both Xp models which is particularly useful for identifying acupuncture and trigger points.



"I have been extremely impressed with the very thorough support and aftersales care given by Omega - very reassuring when incorporating a new electrotherapy modality."

Helen Tompkins
MSc Dip ITEC Dipl IHHT
MMAA BCMA

Interchangeable **probes** are available in a variety of wavelengths, or cluster configurations, to suit the particular individual requirements of a practitioner and are specifically designed to keep cool, even in the hottest of ambient temperatures. In addition, the probe tips are removable and fully autoclavable - important where cross-infection or contamination are issues. Rechargeable batteries

allow for an average of 8 hours of safe, practical, wire-free usage whether in the field, stable, stud, yard or surgery.



The Xp Clinic is designed for use in the surgery, has the same functions as the Xp Mobile but gives greater emphasis to static use needs. The larger control panel is tilted to the ideal angle for ease of visibility and the body is moulded in white with probes to match.



Padded carry bags are available for both models and included in the Xp Mobile package at no extra cost. Safety goggles, one year warranty and on-site training come as standard with all packages purchased directly.

Training

In addition to the standard on site equipment training, Omega Laser Systems also holds open courses throughout the year. Regular training courses dedicated to equine laser therapy are held at the British School of Racing, Newmarket, and occasionally at other venues around the UK. For more information on courses and forthcoming dates contact us by phone or email or see the training section of our website. For all addresses see details below.



Veterinary permission must be sought prior to any animal treatment.

Certification

Omega Laser Systems Ltd is the longest established manufacturer of Low Level Laser Therapy Systems in the UK, its equipment being certified to the EC Medical Directive standards. Omega has provided products and training to healthcare as well as veterinary centres worldwide for over twenty years. For any queries on laser therapy, equipment, or the company contact Omega on the addresses below.



Omega Laser Systems Ltd
2 Deans Hall Business Park
Oak Road, Little Maplestead
Essex CO9 2RT, UK

Tel: +44 (0)1787 477551
Fax: +44 (0)1787 477510
E-mail: info@omegalaser.co.uk
www.omegalaser.co.uk



Omega Low Level Laser Equipment

for Veterinary Use

