

## What is Laser Therapy?

Laser therapy employs low power or 'soft' laser light to aid the natural healing process of the body safely and effectively.

It has been used for over 30 years and is widely available in the medical field for treatment of pain, wound healing and musculoskeletal conditions.

Laser therapy achieves improved outcomes and rapid healing in the treatment of sports injuries, plantar fasciitis (heel pain), epicondylitis (tennis elbow), achilles tendonitis, acute and chronic back pain, adhesions, rheumatoid and osteo-arthritis, chronic oedema and fracture healing.

Low level lasers should not be confused with surgical lasers which are a different classification of laser. Low level laser therapy cannot burn or harm the skin. Its effects are photo-biochemical, not thermal.

In addition to their direct healing applications, low level lasers also provide an alternative needle-free acupuncture medium.

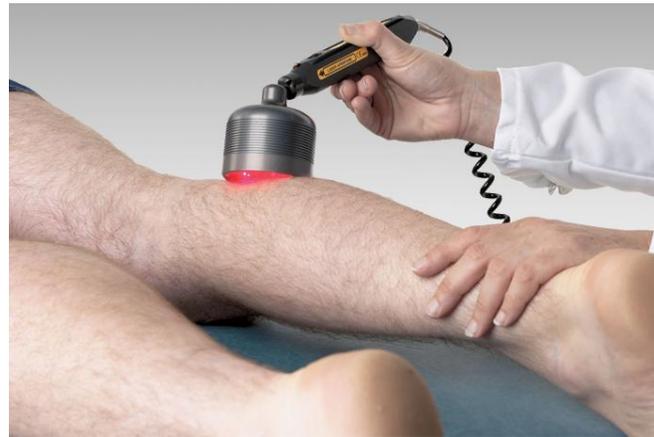


## How does it Work?

The physiological effects of laser therapy have been extensively researched and the details of the mechanisms are increasingly becoming understood.

Particular wavelengths of light stimulate the body's healing cells: initial absorption by the mitochondria leads to increased fibroblast cell proliferation and migration, with modulation of cytokine levels, growth factors, inflammatory mediators and increased tissue oxygenation - all part of the natural healing process.

Essentially by directly treating the damaged tissue with appropriate light, laser therapy helps the body to heal itself. It is especially effective for chronic conditions, or where the immune system is compromised, as it can also re-start a stalled healing process.



In addition to the local cellular effects, research on low level laser therapy has demonstrated both enhanced levels of endorphin release, and the suppression of pain messages previously sent to the brain.

Combining these effects with those from its use in stimulating acupuncture and 'trigger' points, low level laser is an excellent therapy for treating pain.



## The Advantages

Patients can benefit from resolution of soft tissue injuries and pain syndromes without the discomfort and side effects of many other forms of treatment.

Patients respond quickly when treating soft tissue conditions and pain, with results usually evident in the first 1-2 treatments. Treatment times per session are relatively short so overall treatment time shows no significant increase against that of most traditional treatments.

Laser therapy works well in combination with manual therapy techniques for pain relief and improved resolution of acute and chronic pain syndromes.

## The Treatment

Treatment is quick, pain-free, easy to apply and effective. Appropriate probes are placed on skin at particular points on or relating to the damaged area and light, which is controlled for wavelength, power, pulsing rate and duration passes into the tissue.



Depending upon the condition to be treated, laser therapy is offered on a twice or once weekly basis with progressively less frequent treatments until the condition has been resolved. The patient will feel nothing at the point of application, but many report a wonderful relaxed feeling, probably due to laser's effect on endorphin release as demonstrated in research.

## Established & Safe

Laser therapy is extremely safe. Low level lasers are used to treat a wide variety of conditions in medical organisations across the world. Often called 'soft' or 'cold' laser, the low intensity laser beam does not cut or

burn and has no side effects, other than the feeling of relaxation. Laser goggles are worn as precautionary eye protection.

Most people are suitable for the therapy although there are certain cautions and contraindications as with any form of electrotherapy equipment – your clinician will advise.

## Where is the Therapy Available?

Most readily available through private physiotherapy, osteopathic, podiatry and chiropractic clinics, laser therapy is also used by hospitals, both NHS and private, particularly for treatment of soft tissue injuries, wound healing and in their pain clinics. Treatment through the NHS depends upon referral and availability.

Rapid, non-invasive, long-established and extensively researched, laser therapy practice is evidence-based and provides a valuable effective option for physical therapists and sports medicine practitioners worldwide.



Omega Laser Systems Ltd

2 Deans Hall Business Park, Oak Road, Little Maplestead, Essex CO9 2RT, UK. [www.omegalaser.co.uk](http://www.omegalaser.co.uk)

# LASER THERAPY



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Physiotherapy

