

# LIGHT Therapy for Neuropathy

---

Arroyo Physical Therapy  
2693 E Washington Blvd, Pasadena, CA 91107  
626.593.2283

## Information for Physicians

### **What is LIGHT Therapy?**

Light therapy is the use of therapeutic light in the form of red and infrared lasers. This modality is FDA approved and has been in use in physical medicine for almost 20 years in the EU & Canada, and for the past 10 years in the US. Our office has been using therapeutic lasers for over 5 years now with excellent results.

### **How does it work?**

Unlike cutting lasers, therapeutic lasers produce no heat or sensation of any kind and do not cause any tissue destruction. Therapeutic lasers penetrate deep into the tissues of the body and activate ATP activity in the cell's mitochondria by a process called "photobiomodulation". This increases the cell's metabolism by over 40% and results in cellular regeneration, repair, and healing.

### **What conditions are LIGHT therapy used for?**

Clinical studies have shown that LIGHT therapy is extremely effective for neuropathy, pain reduction, tinnitus, soft-tissue injuries, and arthritis. Currently human-trials on stroke are also showing excellent benefits of the laser.

### **Is it proven?**

Yes! We've included a peer-reviewed abstract on various therapeutic applications.

### **What is treatment like?**

Completely comfortable and painless! Application is usually done on the affected site and average treatment time is usually 5-15 minutes. Most patients receive from 4-12 visits, but some conditions may require more. There are almost no contraindications, and lasers can be safely used directly over pacemakers, plastic or metal implants, and bone. If you desire a demonstration, contact us and we can visit to you with our portable model.

### **What about diabetic neuropathy?**

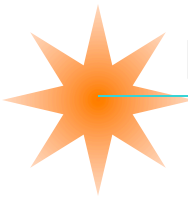
Chronic conditions such as diabetic neuropathy often require continuous treatment because the disease process itself is progressive. LIGHT Therapy protocols have had excellent outcomes in terms of improved circulation and sensation when used several times a week as ongoing care.

### **Why hasn't this been more widely used?**

There are a few possible reasons. First, lasers are very expensive. Secondly, there are no insurance reimbursement codes to cover this modality. The few clinics that do use lasers may simply add them as a treatment adjunct, but without proper training or full understanding of their purpose. Our Physical Therapists are expertly trained and have been successfully using lasers for over 5 years.

### **Does insurance cover LIGHT therapy for neuropathy treatment?**

Qualifying criteria includes severe pain that limits mobility, and balance disorders that may lead to falls and injury. If your patient does not qualify, affordable cash programs are available including supervised home rental of specially designed patient units.



# LIGHT Therapy for Neuropathy

---

Arroyo Physical Therapy  
2693 E Washington Blvd, Pasadena, CA 91107  
626.593.2283

## Information for Physicians

Improved foot sensitivity and pain reduction in patients with peripheral neuropathy after treatment with monochromatic infrared photo energy – MIRE. J of Diabetes and its Complications, vol 20. issue 2, march–April 2006. p 81–87.

Laser Therapy as a New Modality in the Treatment of Incomplete peripheral Nerve Injuries. Clinical Double–Blind Placebo–controlled Randomized Study. S. Rochkind, et. al. Departments of Neurosurgery, Neurology, and Physical Medicine. Tel Aviv Sourasky Medical Center. Presented at the world conference on laser therapy, Sao Paulo Brazil, Nov. 2005.

“Our Double–blind study indicates that laser therapy enhances the recovery on injured nerves. The therapeutic results show an objective progressive improvement in nerve function leading to significant functional recovery.”

Phototherapy promotes regeneration and functional recovery on injured peripheral nerve. Anders, Geuna, Rochkind; Neuro Research. Vol 26, 2004.

Symptomatic Reversal of Peripheral Neuropathy in Patients with Diabetes. Kochman, et. al. J Am Podiatr Med Assoc. 92(3): 125–130. 2002.

“On the basis of Semmes–Weinstein monofilament values, 48 subjects (98%) exhibited improved sensations after 6 treatments, and all subjects had improved sensation after 12 treatments.”

Efficacy of 780–nm Laser Phototherapy on Peripheral Nerve Regeneration (Double–Blind Randomized Study): Rochkind et. al. Photomedicine and Laser Surgery. June 1, 2007, 25(3): 137–143.

Diabetic Neuropathic Foot Ulcer: Successful Treatment by Low–Intensity Laser Therapy. A. Schindle, et. al. Dermatology 1999; 198: 314–316.

Improved sensitivity in patients with peripheral neuropathy. Dellelis SL, et. al. J Am Pod. 2005 Mar–Apr: 95–2: 143–7.

Reversal of diabetic neuropathy. Powel, Carnegie, Burke. Adv Skin Wound Care. 2004 Jul–Aug. 17 (6): 295–300.