

Medical Coverage Policy | Low-Level Laser Therapy for Musculoskeletal Conditions



EFFECTIVE DATE: 12|07|2010

POLICY LAST UPDATED: 12|15|2015

OVERVIEW

Low-level laser therapy (LLLT), also called photobiomodulation, is being evaluated to treat a variety of conditions including soft tissue injuries, myofascial pain, tendinopathies, nerve injuries, joint pain, lymphedema, and oral mucositis.

MEDICAL CRITERIA

Not applicable

PRIOR AUTHORIZATION

Not applicable

POLICY STATEMENT

BlueCHiP for Medicare and Commercial Products

Low-level laser therapy is considered **not medically necessary** for all indications including but not limited to the treatment of carpal tunnel syndrome as there is insufficient evidence in the published, peer-reviewed scientific literature to demonstrate its effectiveness.

COVERAGE

Benefits may vary between groups and contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage, or Subscriber Agreement for limitations of benefits/coverage when services are not medically necessary.

BACKGROUND

Low-level laser therapy, also called photobiomodulation, “cold lasers,” or “non-thermal lasers,” refers to the use of red-beam or near-infrared lasers with a wavelength between 600 and 1000 nm and power from 5 to 500 MW. In contrast, lasers used in surgery typically use 300 Watts. When applied to the skin, these lasers produce no sensation and do not burn the skin. Because of the low absorption by human skin, it is hypothesized that the laser light can penetrate deeply into the tissues where it has a photobiostimulative effect. The exact mechanism of its effect on tissue healing is unknown; hypotheses have included improved cellular repair and stimulation of the immune, lymphatic, and vascular systems. LLLT is being evaluated to treat a wide variety of conditions, including soft tissue injuries, myofascial pain, tendinopathies, nerve injuries, and joint pain. LLLT has also been evaluated for lymphedema, carpal tunnel syndrome and cancer therapy-induced oral mucositis in patients treated by radiotherapy and/or chemotherapy and hematopoietic stem-cell transplantation.

A number of low-level lasers have received clearance for marketing from the U.S. Food and Drug Administration (FDA) for the treatment of pain. Data submitted to the FDA as part of the FDA 510(k) approval process for the MicroLight 830® Laser consisted of application of the laser over the carpal tunnel 3 times a week for 5 weeks. The labeling states that the “MicroLight 830 Laser is indicated for adjunctive use in the temporary relief of hand and wrist pain associated with Carpal Tunnel Syndrome.” In 2006, the FDA provided marketing clearance for the GRT LITE™, which listed the Tuco Erchonia PL3000, the Excalibur System, the Microlight 830 Laser, and the Acculaser Pro as predicate devices. Indications of the GRT LITE for carpal tunnel syndrome are similar to the predicate devices: “adjunctive use in providing temporary relief

of minor chronic pain.” The LightStream™ Low Level Laser device received 510(k) marketing clearance in 2009 for adjunctive use in the temporary relief of pain associated with knee disorders with standard chiropractic practice. A number of clinical trials of LLLT are underway in the United States, including studies of wound healing. Other protocols have used low-level laser energy applied to acupuncture points on the fingers and hand. This technique may be referred to as “laser acupuncture.”

The available literature on LLLT as a treatment for lymphedema, prevention of oral mucositis, wound healing, or pain of various etiologies and in a variety of anatomic sites presents inconsistent results and methodologic weaknesses, including lack of follow-up evaluation, that prevent drawing firm conclusions regarding efficacy. Therefore, LLLT remains investigational for all indications.

CODING

BlueCHiP for Medicare and Commercial Products

There is no specific CPT code for low-level laser therapy. However, the following codes may be used but are **not medically necessary when used for low-level laser therapy**:

97026

S8948

RELATED POLICIES

Not applicable

PUBLISHED

Provider Update, February 2016

Provider Update, May 2014

Provider Update, April 2013

Provider Update, March 2012

Provider Update, February 2010

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3. Fulop AM, Dhimmer S, Deluca JR et al. A meta-analysis of the efficacy of laser phototherapy on pain relief. *Clin J Pain* 2010; 26(8):729-36.
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6. Chang WD, Wu JH, Jiang JA et al. Carpal tunnel syndrome treated with a diode laser: a controlled treatment of the transverse carpal ligament. *Photomed Laser Surg* 2008; 26(6):551-7.
7. Ekim A, Armagan O, Tascioglu F et al. Effect of low level laser therapy in rheumatoid arthritis patients with carpal tunnel syndrome. *Swiss Med Wkly* 2007; 137(23-24):347-52.
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