

Medical Coverage Policy



Low-Level Laser Therapy for Musculoskeletal Conditions

Device/Equipment Drug Medical Surgery Test Other

Effective Date:	12/7/2010	Policy Last Updated:	12/20/2011
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Prospective review is recommended/required. Please check the member agreement for preauthorization guidelines.

Prospective review is not required.

Description:

Low-level laser therapy (LLLT), 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 1,000 nm and power from 5–500 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 in the treatment of carpal tunnel syndrome. A number of low-level lasers have received clearance for marketing from the U.S. Food and Drug Administration (FDA) specifically for the treatment of carpal tunnel syndrome. As of October 2009, no devices have received FDA clearance for applications other than treatment of pain. 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."

Several devices that provide LLLT have been approved under the 501(k) approval process for various indications. These devices include but are not limited to:

- MicroLight 830™ (MicroLight Corporation of America, Missouri City, TX)
- Thor Laser System (Thor International Ltd, Amersham, UK)
- Luminex LL Laser System® (Medical Laser Systems, Inc, Branford CT)
- Vectra Genisys Laser System® (Chattanooga Group, Hixson, TN)

In summary, the available literature has not shown laser therapy to be as effective as established treatments for the treatment of various musculoskeletal conditions, including carpal tunnel syndrome, or for wound healing. Randomized controlled trials involving larger numbers of patients comparing LLLT with established treatments and reporting complete dosage information are required.

Medical Criteria:

Not applicable.

Policy:

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/contracts. Please refer to the appropriate Evidence of Coverage or Subscriber Agreement for the applicable "Services not medically necessary."

Coding:

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 Application of a modality (requiring constant provider attendance) to one or more areas; low-level laser; each 15 minutes

Published:

Provider Update, February 2010

Provider Update, March 2012

References:

Blue Cross and Blue Shield Association: 2.01.56 Low-Level Laser Therapy. Reviewed with literature search/December 2009.

Accessed 7/27/2010, 11/30/2011

http://blueweb.bcbs.com/global_assets/special_content/medical_policy/policymanual/policy.html?pnum=20156

Centers for Medicare and Medicaid Services. Local Coverage Determination (LCD) for Outpatient Physical and Occupational Therapy Services (L29833) Accessed 11/30/11
<http://www.cms.gov/medicare-coverage-database/overview-and-quick-search.aspx>

Medicare National Coverage Determinations Manual; Chapter 1, Part 4 (Sections 200 – 310.1); Coverage Determinations. 270.6 - Infrared Therapy Devices (Effective October 24, 2006). Accessed 11/30/11
http://www.cms.gov/manuals/downloads/ncd103c1_Part4.pdf

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