

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



EFFECTIVE DATE: 12|07|2010
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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.

PRIOR AUTHORIZATION

Not applicable.

POLICY STATEMENT

Blue CHiP for Medicare and Commercial

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.

MEDICAL CRITERIA

Not applicable.

BACKGROUND

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 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. One of the disorders that LLLT has been evaluated for is 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) 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 literature on LLLT for carpal tunnel syndrome consists of a number of randomized controlled trials. However, results of these trials are inconsistent, with many studies showing no benefit with LLLT for all indications. Therefore, the procedure is considered not medically necessary as there is insufficient peer-reviewed scientific literature that demonstrates the procedure is effective.

COVERAGE

Benefits may vary between groups/contracts. Please refer to the appropriate Evidence of Coverage document or member Subscriber Agreement for the applicable "Services not medically necessary."

CODING

BlueCHiP for Medicare and Commercial

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

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|-----------------|----------|
| Provider Update | May 2014 |
| Provider Update | Apr 2013 |
| Provider Update | Mar 2012 |
| Provider Update | Feb 2010 |

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