Protocol

Skin Contact Monochromatic Infrared Energy as a Technique to Treat Cutaneous Ulcers, Diabetic Neuropathy, and Miscellaneous Musculoskeletal Conditions

(10122)

Medical Benefit		**Effective Date**: 01/01/06	**Next Review Date**: 01/15
Preauthorization	No	**Review Dates**: 02/07, 02/08, 01/09, 01/10, 01/11, 01/12, 01/13, 01/14	

The following Protocol contains medical necessity criteria that apply for this service. It is applicable to Medicare Advantage products unless separate Medicare Advantage criteria are indicated. If the criteria are not met, reimbursement will be denied and the patient cannot be billed. ***Preauthorization is not required but is recommended if, despite this Protocol position, you feel this service is medically necessary; supporting documentation must be submitted to Utilization Management.*** *Please note that payment for covered services is subject to eligibility and the limitations noted in the patient's contract at the time the services are rendered.*

Description

Monochromatic infrared energy (MIRE) treatment is a therapy that uses infrared light therapy through contact with the skin for potential use in multiple conditions including cutaneous ulcers, diabetic neuropathy, and musculoskeletal and soft tissue injuries.

Background

Monochromatic infrared energy (MIRE) refers to light at a wavelength of 880 nm. MIRE can be delivered through pads containing an array of 60 superluminous infrared diodes emitting pulsed near-infrared irradiation. The pads can be placed on the skin, and the infrared energy is delivered in a homogeneous manner in a session lasting from 30–45 minutes.

Regulatory Status

The Anodyne Professional Therapy System is a MIRE device that received marketing clearance from the U.S. Food and Drug Administration (FDA) in 1994 through the 510(k) process. A device specifically for home use is also available. The labeled indication is for "increasing circulation and decreasing pain." MIRE devices have been investigated as a treatment of multiple conditions including cutaneous ulcers, diabetic neuropathy, musculoskeletal and soft tissue injuries, including temporomandibular disorders, tendonitis, capsulitis, and myofascial pain. The proposed mechanism of action is not known, although some sort of photobiostimulation has been proposed, as well as increased circulation related to an increase in plasma of the potent vasodilator nitric oxide.

Related Protocol

Low-Level Laser Therapy

Policy (Formerly Corporate Medical Guideline)

Skin contact monochromatic infrared energy is considered **investigational** as a technique to treat cutaneous ulcers, diabetic neuropathy, and musculoskeletal conditions, including but not limited to temporomandibular disorders, tendonitis, capsulitis, and myofascial pain.

Services that are the subject of a clinical trial do not meet our Technology Assessment Protocol criteria and are considered investigational. *For explanation of experimental and investigational, please refer to the Technology Assessment Protocol.*

It is expected that only appropriate and medically necessary services will be rendered. We reserve the right to conduct prepayment and postpayment reviews to assess the medical appropriateness of the above-referenced procedures. **Some of this Protocol may not pertain to the patients you provide care to, as it may relate to products that are not available in your geographic area.**

References

We are not responsible for the continuing viability of web site addresses that may be listed in any references below.

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6. Franzen-Korzendorfer H, Blackinton M, Rone-Adams S et al. The effect of monochromatic infrared energy on transcutaneous oxygen measurements and protective sensation: results of a controlled, double-blind, randomized clinical study. Ostomy Wound Manage 2008; 54(6):16-31.
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13. Horwitz LR, Burke TJ, Carnegie D. Augmentation of wound healing using monochromatic infrared energy. Exploration of a new technology for wound management. Adv Wound Care 1999; 12(1):35-40.
14. Hsieh RL, Lo MT, Lee WC et al. Therapeutic effects of short-term monochromatic infrared energy therapy on patients with knee osteoarthritis: a double-blind, randomized, placebo-controlled study. J Orthop Sports Phys Ther 2012; 42(11):947-56.
15. Association for the Advancement of Wound Care. Association for the Advancement of Wound Care Guideline of Pressure Ulcer Guidelines. 2010. Available online at: http://aawconline.org/wp-content/uploads/2011/08/AAWCPressureUlcerGuidelineofGuidelinesAug11.pdf. Last accessed November, 2013.
16. Centers for Medicare and Medicaid Services National Coverage Determination (NCD) for Infrared Therapy Devices (270.6), Implementation Date 1/16/2007.