



CIGNA MEDICAL COVERAGE POLICY

The following Coverage Policy applies to all health benefit plans administered by CIGNA Companies including plans formerly administered by Great-West Healthcare, which is now a part of CIGNA.

Subject Complex Lymphedema Therapy (Complete Decongestive Therapy)

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Hyperlink to Related Coverage Policies

Lymphedema Pumps and Sleeves
 Physical Therapy
 Pneumatic Compression Devices for the Treatment of Vascular Diseases of the Lower Extremities

INSTRUCTIONS FOR USE

Coverage Policies are intended to provide guidance in interpreting certain **standard** CIGNA HealthCare benefit plans. Please note, the terms of a customer's particular benefit plan document [Group Service Agreement (GSA), Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a customer's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a customer's benefit plan document **always supercedes** the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. Proprietary information of CIGNA. Copyright ©2011 CIGNA

Coverage Policy

Coverage for the treatment of lymphedema, including complex lymphedema therapy, may be governed by federal and/or state mandates. Under many benefit plans, complex lymphedema therapy is subject to the terms, conditions and limitations of the applicable benefit plan's Short-Term Rehabilitative Therapy benefit and schedule of copayments. Many benefit plans include a maximum allowable benefit for duration of treatment or number of visits. When the maximum allowable benefit is exhausted, coverage will no longer be provided, even if the medical necessity criteria described below are met. Please refer to the applicable benefit plan document to determine benefit availability and the terms, conditions and limitations of coverage.

If coverage is available for complex lymphedema therapy, the following conditions of coverage apply.

CIGNA covers complex lymphedema therapy (complete decongestive therapy) as medically necessary for the treatment of intractable lymphedema when ALL of the following are met:

- Documented failure of a reasonable course of conservative medical management that includes home exercises, limb elevation, and compression garments.
- The lymphedema is directly responsible for impaired functioning in the affected limb.
- The complex lymphedema therapy is prescribed by a physician or performed under the supervision of a physician.

General Background

Lymphedema is a failure of the lymphatic transport system resulting in the accumulation of lymphatic and edema fluid in the soft tissue. Under normal circumstances, the lymphatic system regulates tissue fluid balance by maintaining equilibrium between tissue fluid filtration and reabsorption. This is accomplished through the drainage of excess fluid containing protein, lipids, microorganisms, cells and debris from the tissue, with the fluid being filtered and returned to the bloodstream. Primary lymphedema is a result of congenital defects of the lymphatic system and is rare. Secondary lymphedema is acquired and due to an obstruction or interruption in the lymphatic system. In the United States, the most common causes of lymphedema are cancer and treatment related to cancer. Patients undergoing surgery for breast cancer that includes node dissection or axillary radiation therapy are at high risk of developing lymphedema.

Complex lymphedema therapy (CLT) is a noninvasive treatment that is considered a standard of care for lymphedema. This method has also been referred to as complete decongestive physiotherapy (CDP), and complex decongestive therapy (CDT). The treatment aim is to reduce and control the amount of swelling in the affected limb and restore function. The objective of the technique is to redirect and enhance the flow of lymph through intact cutaneous lymphatics. Programs are generally provided on an outpatient basis in the office setting or in a lymphedema rehabilitation center or clinic (Lasinski and Boris, 2002; MacDonald, et al., 2003).

The typical CLT program consists of two phases of treatment—a treatment phase and a maintenance phase. Phase I, the treatment phase, usually last two to four weeks. This phase consists of four components (Lawenda, et al., 2009):

- Skin and nail care: The purpose is to inspect skin, provide moisture and prevent infection.
- Manual lymph drainage (MLD): This is a light, massage-like technique that is performed for 30-60 minutes and is used to stimulate residual lymphatic vessels to carry excess fluid from the affected extremity.
- Compression bandaging: This involves wrapping multi-layered bandages around affected limb.
- Therapeutic exercise: This includes movement of the limb through a range of motion with bandaging in place.

Most patients will be able to progress to a home-based, self-managed program after an initial in-office program of 1–2 weeks. Instruction in self-management should begin in the first week of therapy. Both patients and family are taught bandaging and exercise techniques, as well as the essentials of skin and nail care. After the initial one- to two-week program, patients should be re-evaluated to determine whether continued in-office therapy is necessary or if treatment can be provided in the home.

Phase II, the maintenance phase, consists of life-long self-care to maintain the size of the limb. In this phase, the patient maintains and optimizes the results by applying the techniques learned in the treatment phase including: skin and nail care, wearing an elastic sleeve during the day, bandaging the affected limb overnight and exercises (Petrek, 2000).

Duration and Frequency

A program of complex lymphedema therapy provided 2–5 times per week for two weeks is generally considered medically necessary for the treatment of primary or secondary lymphedema, in the absence of any contraindications. Programs that go beyond a four-week period are generally considered not medically necessary.

Contraindications

Absolute contraindications to lymphedema therapy include:

- acute infections of the affected limb
- venous or arterial obstruction (deep vein thrombosis)
- active malignancy, confirmed or suspected local disease
- unwillingness or inability of the member to participate in the treatment

Relative contraindications to lymphedema therapy include:

- suspicion of deep vein thrombosis prior to starting treatment
- congestive heart failure

- when the local massage is performed in area of irradiated soft tissue

Literature Review

A technology assessment requested by Centers for Medicare and Medicaid Services (CMS) was conducted by McMaster University Evidence-based Practice Center for the Agency for Healthcare Research and Quality (AHRQ) (Oremus M, et al., 2010) diagnosis and treatment of secondary lymphedema. The review included randomized controlled trials or observation studies with comparison groups (e.g., cohort, case control). The assessment included the following:

- Complex decongestive therapy (CDT) has been observed to have a significant effect on edema reduction and is recognized internationally as a successful treatment for lymphedema.
- There is no single treatment that is considered usual care for lymphedema. At this time, CDT, which is a combination of therapies, is suggested as the main method of conservative care for lymphedema. CDT includes manual lymphatic drainage (MLD), application of compression low stretch bandages, exercise and skin care.

Devoogdt et al. (2010) conducted a systematic review of combined physical therapy, intermittent compression and arm elevation for treatment of lymphedema secondary to axillary dissection for breast cancer. The review included ten randomized controlled trials and non-randomized, experimental trials. The review found that combined physical therapy can be considered as an effective treatment modality for treatment of lymphedema; however the effectiveness of its different components remains uncertain.

Karki et al. (2009) reported on a systematic review of randomized controlled trials on physiotherapy methods of lymphedema therapy in breast cancer patients. Fourteen studies were included of which two had moderate risk or bias and the remainder had high risk. The interventions and comparisons varied across all trials. In general the treatment duration was short ranging from one to four weeks. The review found that there was moderate evidence that compression bandages decreased lymphedema and evidence on other physiotherapy methods and combinations is limited due to the poor quality of the studies. There was no evidence found regarding outcomes other than upper limb volume. The authors concluded that there is a need for well-designed trials with patient-related outcomes on the effectiveness of manual lymph drainage, guidance and therapeutic exercises.

A systematic review of the common conservative therapies for arm lymphedema secondary to breast cancer treatment was conducted by Mosely et al. (2007). The review included the following treatments: complex physical therapy, manual lymphatic drainage, pneumatic pumps, oral pharmaceuticals, low-level laser therapy, compression bandaging and garments. The review found that the more intensive and health professional based therapies, such as complex physical therapy, manual lymphatic drainage, pneumatic pump and laser therapy generally yielded the greater volume reductions. Self-initiated therapies such as compression garment wear, exercise and limb elevation were found to yield a lesser volume reduction. The review included randomized, controlled, parallel and cross-over, case-control and cohort studies. A meta-analysis could not be performed due to the treatment and data heterogeneity. There were five studies reviewed that involved complex physical therapy. All of the studies demonstrated that a reduction in limb volume and/or percentage edema can be achieved with complex physical therapy, therapy plus pump therapy and a combination of therapies. The review concluded that "Despite the range of positive outcomes identified in this review, the evidence to support them is, in some instances, poor. Therefore, there is still a need for large scale, high level clinical trials in this area. "

A Cochrane review was conducted to assess the effect of physical treatment programs on the volume, shape, condition and long-term control of edema in lymphedema limbs (Badger, et al., 2004). Three studies involving 150 patients were included in the review. Meta-analysis was not performed due to the poor quality of the trials. It was noted that none of the studies reviewed the same intervention, which made it impossible to combine the data. The reviewers concluded that there is not enough evidence to draw conclusions regarding which treatment is the most useful for lymphedema and that there is a clear and pressing need for well-designed, randomized trials of the whole range of physical therapies to determine the best approach to managing lymphedema.

Several case series have been reported in the literature to support the effectiveness of this technique in reducing the volume of swelling and the measurements of the extremity. While the reported results are promising, there is insufficient evidence to support the conclusion that complex lymphedema therapy, or any of its individual components, is superior to any other form of manual lymph drainage methods.

Professional Societies/Organizations

The National Lymphedema Network (NLN): The NLN published a position statement regarding treatment of lymphedema (NLN, 2011). Included in the document were the following statements regarding Complex decongestive therapy (CDT):

- CDT is the main treatment for lymphedema. Experts who treat lymphedema consider CDT the “gold standard” of treatment. The treatment has been shown to be safe and effective. CDT is the current international standard of care for managing lymphedema.
- CDT has been shown to be effective in large numbers of case studies demonstrating limb volume reductions of 50–70% or more, improved appearance of the limb, reduced symptoms, improved quality of life, and fewer infections after treatment. Even people with progressive lymphedema for 30 years or more before starting CDT have been shown to respond.
- Patient adherence during Phase II CDT is critical for preserving volume reduction.
- It is recommended that CDT adaptations or other lymphedema treatments be used on a case by case basis under the supervision of a healthcare provider (e.g., physician, nurse, physician assistant, therapist) with demonstrated expertise in lymphedema management.

International Society of Lymphology (ISL): In 2009, the ISL published a consensus document regarding the diagnosis and treatment of peripheral lymphedema (ISL, 2009). The document makes the following notes regarding lymphedema treatment:

- Complex Lymphedema Therapy (CDT) is included in the statement as a standard treatment for lymphedema that is backed by longstanding experience. The first phase includes skin care, light manual massage, range of motion exercise and compression with multilayered bandage-wrapping. The second phase aims to conserve and optimize results obtained in Phase 1.
- An assessment should be made of limb volume before, during and after treatment. Treatment outcomes should be reported in a standardized manner in order to assess effectiveness of treatment protocols.

Summary

Complex lymphedema therapy (CLT) includes: meticulous skin care, manual lymph drainage, compression therapy, exercises and patient education for home management and continuation of the treatment. Although the literature is limited regarding the efficacy of this treatment, CLT is widely used and accepted in clinical practice as a noninvasive treatment for intractable lymphedema.

Coding/Billing Information

Note: This list of codes may not be all-inclusive.

Covered when medically necessary:

CPT®* Codes	Description
97140	Manual therapy techniques (e.g., mobilization/manipulation, manual lymphatic drainage, manual traction) one or more regions, each 15 minutes

HCPCS Codes	Description
S8950	Complex lymphedema therapy, each 15 minutes

ICD-9-CM Diagnosis Codes	Description
457.0	Post-mastectomy lymphedema syndrome
457.1	Other lymphedema
457.2	Lymphangitis
757.0	Hereditary edema of legs

*Current Procedural Terminology (CPT®) © 2010 American Medical Association: Chicago, IL.

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Policy History

Pre-Merger Organizations	Last Review Date	Policy Number	Title
CIGNA HealthCare	5/15/2007	0076	Complex Lymphedema Therapy (Complete Decongestive Therapy)

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