Quartz

Lymphedema-Intermittent Pneumatic Compression Devices and Surgical Treatment

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I. Documentation Required:

To facilitate the authorization process referral requests must include the following:

1. Documentation of the patient's diagnosis, medical history and physical exam including lymphedema measurements obtained in the same manner and with reference to the same anatomic landmarks before, during and after trials and therapy and measurements of the opposite limb for comparison when appropriate.
2. Documentation of the impact on activities of daily living.
3. Documentation of previous treatments related to lymphedema including pharmacotherapies, wound care, nutritional interventions, physical and occupational therapy and surgeries.
4. Documentation from applicable specialists caring for patient including physicians and advance practice professionals, dieticians/nutritionists, wound clinic, etc.

II. Criteria for Medical Necessity:

A. Pneumatic Compression Device without Calibrated Gradient Pressure Control (E0650 Non-segmental and E0651 Segmental)

Lymphedema pumps / pneumatic compression devices without calibrated gradient pressure control are medically necessary for home use when **ALL** the following criteria are met:

1. Diagnosis of lymphedema; **AND**
2. Chronic, severe lymphedema with at least **ONE** of the following clinical findings
    a. Skin breakdown with persistent lymph fluid drainage/seepage, **OR**
    b. Elephantiasis deformity, **OR**
    c. Detailed measurements over time that confirm the presence of lymphedema and a known etiology.
3. Lymphedema is unresponsive to a 4-week trial of conservative therapy including trials of **ALL** the following or valid reason that one or more are contraindicated:
    a. Complex decongestive physiotherapy
        i. Compression bandage system / garment which provides adequate graduated compression of a minimum of 30mmHg distally to move fluid proximally worn 23 hours per day, **AND**
        ii. Regular exercise; **AND**
        iii. Elevation of the limb; **AND**
        iv. Manual lymphatic drainage by a trained therapist and self-manual lymphatic drainage for 30 minutes to 1 hour every day; **AND**
    b. Diet evaluation with implementation of changes to decrease lymphedema; **AND**
    c. Medication therapy optimized as appropriate (e.g., diuretic therapy); **AND**
    d. Nutritional status optimized to correct protein malnutrition and anemia and decrease lymphedema.

NOTE: Any improvement in lymphedema with these measures is considered a response and conservative measures should continue with weekly assessments until no response is seen over a 4-week time period at which time a Pneumatic Compression Device without Calibrated Gradient Pressure may be medically necessary.

4. Pneumatic Compression Devices without calibrated gradient pressure control for home usage must meet the following criteria:
    a. In-person fitting of device by a trained technician.
    b. Patient device education and supervision provided by trained technician.

B. Pneumatic Compression Device WITH Calibrated Gradient Pressure Control (E0652 segmental)

Lymphedema pumps / pneumatic compression devices with calibrated gradient pressure control are medically necessary for home use according to the following criteria:

1. Diagnosis of lymphedema; **AND**
2. Criteria for pneumatic compression device without calibrated gradient pressure control met (under A. criteria 1-4 above); **AND**
3. Lymphedema meets **ONE** of the following:
    a. Failed to improve with a 4-week trial of a device without calibrated gradient pressure control. This trial must include **ALL** the following:
        i. Documented daily, multiple hour home usage of a device which has been personally fit for the patient; **AND**
        ii. Device achieved 30mmHg compression pressure; **AND**
        iii. Patient received training on device usage; **AND**
        iv. Compliant with conservative therapy trial elements A.3. a. through g. above. **OR**
    b. Lymphedema extends to the chest, trunk and/or abdomen, **OR**
    c. Lymphedema extends to the neck and/or head **AND**
        i. Patient does not have **ANY** of the following:
            1) Acute thyroid disease,
            2) Radiation dermatitis,
            3) Unhealed or open wounds or incisions,
            4) Surgical flaps < 6-8 weeks post op,
            5) Facial infection,
            6) Carotid sinus hypersensitivity syndrome,
            7) Increased intracranial pressure,
            8) TIA or stroke in past 30 days,
            9) Symptomatic bradycardia without pacemaker
4. Pneumatic Compression Devices with calibrated gradient pressure control for home usage must meet the following criteria:
    a. In-person fitting of device by a trained technician.
    b. Patient device education and supervision provided by trained technician.

C. Conditions considered Experimental, Investigational or not Medically Necessary:

1. Surgical treatment of lymphedema including,
    a. Lymphovenous anastomosis (LVA)
    b. Vascularized lymph node transfer (VLNT)
    c. Liposuction
2. Use of bioimpedance spectroscopy to detect/measure lymphedema.

3. Use during pregnancy
4. Decompensated congestive heart failure
5. Active venous thromboembolism in the limb/area of device use
6. Active infection in the limb/area of device use

REFERENCES:

American Venous Forum (AVF): The AVF issued clinical practice guidelines regarding the surgical treatment of chronic lymphedema, updated in 2017 (Glovicski and AVF, 2017).

Campisi C, Campisi C, Accogli S, Campisi C, Boccardo F. Lymphedema staging and surgical indications in geriatric age. BMC Geriatrics. 2010;10(Suppl 1): A50.

Glovicski P, American Venous Forum. Handbook of Venous and Lymphatic Disorders. Guidelines of the American Venous Forum. Fourth Edition. CRC Press; 2017.

Hayes, Inc. Health Technology Brief. Flexitouch system for lymphedema: a review of reviews. Publication date: October 3, 2017. Accessed May 30, 2018.

Hayes, Inc. Health Technology Brief. Intermittent pneumatic compression therapy for mastectomy-related lymphedema. Publication date: January 11, 2011. Annual review: February 6, 2013. Archived February 24, 2014. Accessed May 30, 2018.

Hayes, Inc. Medical Technology Directory. A Review of Reviews. Surgical treatment of lymphedema: a review of reviews. Publication date: May 11, 2017. Accessed May 30, 2018.

Hayes, Inc. Medical Technology Directory. Bioelectrical impedance (bioimpedance) analysis for assessment of lymphedema. Publication date: March 26, 2015. Annual review: March 19, 2018. Accessed May 30, 2018.

International Society of Lymphology (ISL). The diagnosis and treatment of peripheral lymphedema: 2013 Consensus Document of the International Society of Lymphology. Lymphology. 2013;46(1):1-11.

National Cancer Institute (NCI). Lymphedema (PDQ®) – Health Professional Version. Updated July 17, 2015. Available at: https://www.cancer.gov/about-cancer/treatment/side-effects/lymphedema/lymphedema-hp-pdq#section/all. Accessed May 8, 2017.

Tran K, Argaez C. Intermittent pneumatic compression devices for the management of lymphedema: a review of the clinical effectiveness and guidelines. Canadian Agency for drugs and technologies in health. Ottawa. March 20, 2018.

HCPCS CODES

E0650	Pneumatic compressor, non-segmental home model
E0651	Pneumatic compressor, segmental home model without calibrated gradient pressure
E0652	Pneumatic compressor, segmental home model with calibrated gradient pressure
E0671	Segmental gradient pressure pneumatic appliance, full leg
E0673	Segmental gradient pressure pneumatic appliance, half leg

E0655	Non-segmental pneumatic appliance for use with pneumatic compressor, half arm
E0669	Segmental pneumatic appliance for use with pneumatic compressor, half leg
E0666	Non-segmental pneumatic appliance for use with pneumatic compressor, half leg
E0656	Segmental pneumatic appliance for use with pneumatic compressor, trunk
E0657	Segmental pneumatic appliance for use with pneumatic compressor, chest
E0665	Non-segmental pneumatic appliance for use with pneumatic compressor, full arm
E0660	Non-segmental pneumatic appliance for use with pneumatic compressor, full leg
E0667	Segmental pneumatic appliance for use with pneumatic compressor, full leg
E0668	Segmental pneumatic appliance for use with pneumatic compressor, full arm
E0671	Segmental gradient pressure pneumatic appliance, full leg
E0672	Segmental gradient pressure pneumatic appliance, full arm