Manual Lymphatic Therapy

Practical Applications of Manual Lymphatic Therapy
A cost effective way to increase patient outcomes
My Passion

Lymphatic work is MY passion

• The problems with standard Manual
Highlights in Lymphatic Research

- *1600’s* Gasparo Asselli, Italian, discovered milky lymphatics in a dog
- *1650* John Pecquet, thoracic duct and cisterna chyli or ‘Pecquet’s cistern’.
- *1700’s* edemas are linked to and insufficient lymphatic system
- *1896* Starling’s Law explains the physiological side of the condition
Introduction

Until recently, the lymphatic system has been a relative mystery in modern medicine.

* Autopsies

* Most of the research began in Europe

* MD training, former treatment of nodes

Current barriers to obtaining IMLD therapy
History of Lymphatic Research

Hippocrates and Aristotle, describe “white blood” in vessel

2000 year Gap (Zuther, p. 102)

1622 Aselli, discovery of lymphatics in dogs

valve system, and the importance of the communication between the thoracic duct

1670 (approx), Rudbeck from Sweden describes the lymphatic system as a whole.

1850’s-1950’s Various scientists and physicians attempted a variety of techniques to...
History of the study of the lymphatic system, cont’d

1922 - Frederic Millard from Toronto first applied specific work on the vessels and nodes termed "lymphatic drainage".

1930’s - Emil Vodder from Denmark developed a specific manual technique to engage the lymphatic system. (Chickley)

1930’s to present - Professor Michael Foldi, Germany, world renowned for lymphatic research and treatment.

1967 - Johanes Asdonk from Germany tested the technique of manual lymphatic therapy on over 20,000 to establish protocol, indications for therapy and contraindications.

1980’s - Treatment of the lymphatics began in the U.S., edemas were commonly treated with lymphedema pumps.

1990’s to present - Manual Lymphatic Therapy becomes more widely taught and utilized in the U.S. for a variety of diagnoses.

Many others worked to create our current foundation for lymphatic work. These prominent scientists and doctors include: Kuhnke, Germany; Kubik, Switzerland; and J. Casley-Smith, Australia.

Currently lymphatic therapy is widely used in Europe, and is reimbursed by insurances.
In my experience I found time and time again, that the patients would be compliant with either the self-massage aspect of MLD, or the exercise component, but not both. With both of these aspects being equally as crucial to the treatment of lymphatic disorders, I have found that the most effective way to increase patient compliance is to integrate the treatment. The patient would be less likely to work on only half the body than he or she would be to drop either the massage or exercise portion.

Also, there are people that cannot wrap their head around the fact that such light work as the manual lymphatic work can have such
Lymphangions-The semi-lunar valves allowing one-way fluid flow only
Pectoral Node Group

Gray’s Anatomy-Copyright Expired
*The supraclavicular group of nodes (also known as the lower deep cervical group), especially on the left, are also sometimes referred to as the signal or sentinel lymph nodes of Virchow or Troisier, especially when sufficiently enlarged and palpable. These nodes (or a single node) are so termed because they may be the first recognized presumptive evidence of malignant disease in the viscera.*
What is Standard MLD/CDP Therapy?

- A complete program including skin care, hygiene, exercises, self massage instruction, MLD, compression therapy
- MLD affects the autonomic nervous system (Wittlinger, p. 29)
- Other names for MLD/CDP
- It is a systematic, rhythmic method of purposefully stretching the skin to produce an increase in the volume of flow of the lymph fluid through the filtering system of the body, resulting in detoxification of the body.
How does Integrated Manual Lymphatic Therapy differ?

Like many types of integrated body work, techniques develop as a result of years of practice and coming to the realization that not any one modality often “cures” a disorder.

It is often a combination of techniques that achieve the greatest results.

The Integrated Manual Lymphatic Therapy (IMLT) techniques are designed to use a variety of manual methods all to stimulate the activity of the lymphatic system and achieve the best results considering the client’s limitations and needs.
What does a “normal” lymph system do?

- Part of the immune system
- Your body’s “sewer system”
- When there is stagnation or a blockage of lymph, immunoglobulin are prevented from reaching the sites where they can perform their immune functions (Wittlinger, p.34)
Lymph Fluid

What Makes Up Lymph Fluid?

- Water Waste and debris
- Minerals and ions
- Proteins
- Fats
- Cells (lymphocytes and macrophages)
- MLD cleans and purifies the tissue by draining it of pollutants.
Lymphatic Treatment Abbreviations

- MLT
- MLD
- CDP
- CLT
- LT
- IMLT
- LM, LDM, MLM, MLDM
Lymphangions-The semi-lunar valves allowing one-way fluid flow only
Pectoral Node Group
*The supravascular group of nodes (also known as the lower deep cervical group), especially on the left, are also sometimes referred to as the sentinel lymph nodes of Virchow or Traversier, especially when sufficiently enlarged and palpable. These nodes (or a single node) are so termed because they may be the first recognized presumptive evidence of malignant disease in the viscera.
What does the lymphatic system do?

This fluid is designed to cleanse and filter the tissues as it goes. The fluid is an open loop system that absorbs excess fluid from extra-cellular tissue spaces. Eventually moved to the circulatory system and joins it in the function of absorbing fats from the intestines. This fluid is rich in white blood cells. Any excess fluid is then moved from the circulatory to the renal system to be excreted. (Zuther, p. ix)

The lymph system functions to filter harmful bacteria, make white blood cells, increasing immunity, maintain a fluid balance in the body, and assist in the digestion of fats in the intestines. (Zuther, p. ix)

A MAJOR component of the immune system.
Laying parallel to the circulatory system, the lymphatic system differs in that it is an open loop system. There is no central pump as with the cardiovascular system, and it moves fluid at a much slower rate. Magically, we are created with all of our major areas of lymph nodes on the ventral side of our body. This is important, because we can protect all of them by curling up in a fetal position if we are to come under attack!
Lymph System Anatomy

- **Superficial lymphatics.** Strings of pearls. Capillary-like vessels includes pre-collectors, collectors
- **Deep lymphatics.** Lymph does not leave a body part or organ without being filtered by the lymphatics.
- **Deep-trunks, ducts,** then empties into the venous system around the clavicles. cysterna chyli
- **Plane Barriers,** (known as watersheds)
- (Zuther, p. 13)
- **Microcirculation and Lymph Transport System**
- Lays parallel to the circulatory system
- Proteins, cell fragments, bacteria, viruses, waste, toxins, & fats
- organic substances are moved through the body via the lymph system. (Wittlinger, p.48)
Lymph Capillaries in the Tissue Spaces

- Lymph capillary
- Tissue cells
- Tissue spaces
- Arteriole
- Venule
- Tissue fluid
- Lymphatic vessel
Anatomy, cont’d

There are 600-700 lymph nodes in the body.

The areas most concentrated with lymph nodes are the neck, each axilla, each groin area, and the abdomen. There are about 200-300 nodes just in the abdomen, intertwined with the organs and vessels. (Foldi, pp. 50-60)

The nodes serve to filter the lymph fluid, thicken the lymph fluid, to make more lymphocytes—which increases the body’s immunity, and to store matter that can’t be removed such as coal dust, dyes, silica, minerals, glass, etc. (Foeldi, Wittlinger, Chickly)
Physiology

Diffusion—molecules in a solution travel from an area of higher concentration to an area of lesser concentration.

Osmosis—movement of water molecules from a higher concentration to a lower concentration, but over a selectively permeable membrane, allowing only water to pass through (not protein in the case of edema), causing an increase in pressure on the side where protein is present, then counter-pressure is necessary to move the water back to the interstitium and decrease pressure in the area.

COP—Colloid osmotic (oncotic) Pressure is the **pulling** pressure of protein to draw fluid toward it.
Physiology

➢ CHP-Capillary Hydrostatic Pressure is the **pushing** force to move fluid out of the tissues and back toward the heart.

➢ If there is an imbalance or deficit in one of these areas, either by anatomy (mechanical insufficiency), or physiology (dynamic insufficiency), edema and/or an imbalance of the lymphatic system will occur. (Foeldi, Wittlinger)  

Starling’s Law
Lymph Transport

Lymph fluid is transported internally through absorption then through suction of the lymph nodes and contraction of the lymphangions 3-7 times per minute. It is also moved externally (outside of the lymph system) from the contraction of muscles through movement and exercise, the pulsing of arteries, breathing, the peristalsis of the intestines, external compression and through manual therapy. (Foeldi & Kubik, p. 37)
How does MLT work?

MLT stimulates the immune system by increasing lymph function directly and blood circulation indirectly. Venous circulation is aided by the motion, and edemas can be reduced. Pain can be reduced by the inhibitory effect of the mechano-receptors-stimulating parasympathetic responses.
What can the techniques be used for?

- To move lymph fluid including protein, fat and toxins from one part of the body to another
- Decrease pain
- Stimulating immunity
- Clearing areas where toxins are held, i.e. cellulite
- Decreasing sympathetic responses, thus helping with depression, anxiety, stress, insomnia and muscle tension
Indications for therapy

❖ Orthopedic traumas, post surgical, wound healing
❖ Lymphedema or Edema (not dynamic)
❖ Arthritis
❖ Anti-spasticity
❖ Pain
❖ Dermatological-acne, scars, cellulite, stretch marks,
❖ Orthopedic Conditions
❖ Sports Medicine, Fractures, Carpal Tunnel
❖ Head and neck/ear congestion, migraines
❖ Dry Eyes, fibromyalgia, CFS/rheumatic conditions
❖ Dependant edema/hemi and paraplegia
❖ Pregnancy
❖ See reference sheet in the back of your manual for a complete list
Immune System Conditions and IMLT

- Due to the direct impact that MLT has on the immune system, these techniques are gentle enough, yet effective.

- Many symptoms of auto-immune disorders such as lupus, fibromyalgia, chronic fatigue, Epstein-Barr/mononucleosis, allergies, eczema, ulcerative colitis, etc. are aided by MLT by speeding up the body’s own detoxification methods which decreases inflammation, pain and allows greater movement, which will in turn allow the body to detox itself better.
Contraindications for Therapy (All Lymphatic Therapies)

➢ Acute CHF
➢ Acute Renal Failure (must be able to urinate)
➢ DVT or any major obstructions or serious cardiac stenosis
➢ Infection (Cellulitis) Infection and inflammation are not the same. Infection always has inflammation, but inflammation is not always infection. Signs and Symptoms of cellulitis: red streaking, fever, chills. Ask if the patient has had any recent cuts or abrasions. Pet scratches, etc.
➢ Active bleeding / internal or external
➢ Undiagnosed Tumors / Cancers
➢ Aortic Aneurysm (No deep work over abdomen)
➢ Arterial Insufficiency
What if CHF/Renal failure is suspected but not diagnosed?

Look for shortness of breath, fatigue, changes in urinary output, whole body swelling, abdominal distension, sudden onset painful edema (could be DVT) or cancer recurrence

See the reference sheet in the back of your manual for a complete list.
Precautions

☐ Thyroid disorders (avoid anterior neck)

☐ Phebitic Areas

☐ Pre-cancerous areas

☐ Any implants, colostomy, insulin pump, pacemaker, etc.

☐ The abdomen during menstruation

☐ Hypotension, treated cancers, (certified therapists only)

☐ New sudden onset edema

☐ Edemas/lymphedemas for certified therapists only
The keys to performing proper Integrated Manual Lymph Therapy

- **Pressure!** Crucial to engage the lymphatics, not the musculoskeletal system. This therapy should NEVER be painful or cause erythema. We use the least amount of pressure necessary to engage the lymphatics. This feels like moving the skin to the point of a myofascial barrier.

- **Rhythm**—On two three, off two three is a good beginners rhythm. As you become more experienced, you will be more tuned in to the rhythms of your clients (include items in p61 book 1)

- **Sequence!**—proximal to distal, opening the nodes and pathways that you are draining to first!
The keys to performing proper Integrated Manual Lymph Therapy

- **Direction** - stretching motion in the direction of the vessel’s origin
- These four facets must be applied correctly to increase the pumping action in the system
- **Full Hands**, using as much surface area as possible, even the palm. This differs from typical Swedish (get access to lymph charts) Develop treatment sequences.
Watersheds of the Human Body
1. Supraclavicular 5x toward sternal notch
2. SCM to Sternal notch-5x
3. Just at the retroauricular nodes to the sternal notch
4. Neck ROM 3 planes
5. Across the chest toward the sternal notch
6. Stimulation of Bilateral Axilla
7. Deep belly breathing, 5x
8. Strokes of right and left upper quadrants toward the corresponding axillae
9. Bilateral shoulder ROM 3 planes
10. Manual strokes from the elbow toward the anterior shoulder
11. Elbow node stimulation
12. Elbow ROM one plane
13. Forearm and Hand strokes toward the elbow
14. Wrist ROM
15. Sweep the entire arm up toward the axilla
16. Axillary node drainage
17. Repeat opposite side of the body
18. Deep belly breathing again
19. Inguinal lymph node stimulation And drain each lower quadrant to the ipsilateral groin nodes
20. Strokes from the knee toward the inguinal nodes, 5x. You can reach and drain the posterior leg as well
21. Hip ROM 3 planes
22. Popliteal node stimulation
23. Knee ROM one plane
24. Lower leg and foot strokes
25. Ankle ROM
26. Sweeps of the entire leg
27. Inguinal node drainage
28. End with the clearing of the neck at all three stations, (1, 2, & 3)
Lymphatic Stimulation Exercises

- Neck Rom, shoulder shrugs, shoulder blade squeeze, shoulder flexion, abduction, bicep curls and triceps extension, wrist extension and flexion, hand pumps, reverse.
- Deep breathing, trunk ROM all planes
- Gluteal squeezes, hip flexion and abduction, knee extension and flexion, ankle pumps, toe curls, reverse.
- Generally: Wand exercises, aquatic exercises, rebounder & jogging, vibration and jumping
Additional Manual Lymphatic Therapy Techniques

- Pay attention to any scar tissue that may affect lymphatic fluid flow, including the direction and rate of flow.

- Loosen up scar tissue within your scopes of practice, i.e. US and soft tissue techniques, scar massage, cross friction massage, etc.

- If the scar is deep, the lymphatics in that area are already damaged, so you do not have to be as wary of pressure in that area.
Additional Manual Lymphatic Therapy Techniques

- Overall increase in lymphatic circulation is important.

- Water activity is important due to the natural compressive force of the water on the limbs. Also, impressive is the fact that the pressure is greater at the bottom of the pool than at the top, so just with water walking, clients will get an increase in the natural flow from distal limbs to proximal body.

- Mini-trampoline jogging/bouncing

- Swiss Ball bouncing, rocking

- Jump-rope

- Diet
Incorporating an MLT routine into your day

Patient Guide:

- Deep belly breaths in the morning before rising. Stimulation of the lymphatics in any problem areas in proper sequence.
- Dry skin brushing along the correct lymphatic pathways in the morning. Applying your skin lotion in the same manner.
- Use your towel as you dry off to aid in the movement of lymph fluid on the back of your body that is hard to reach.

Lymphatic Exercise of Choice: Deliberate cardiovascular exercise or break up the home program into 5 steps at a time and complete a set of them each hour.
What is Lymphedema?

- Lymphedema is an abnormal accumulation of lymph fluid between the tissue layers. This presents as swelling, or edema but has a protein component.

- Edema can result from chemical failure, or decreased reabsorption rates of fluid from the interstitium to the veins and lymph vessels, (renal disease, CHF) or mechanical failure (lymph node removal or trauma to an area). Foldi & Kubik *Lymphology*, p. 224

- Lymphedema can be present anywhere in the body.

- How is it different from other edema?
What causes it?

- There are two primary types of lymphedema.
- The first is **Primary Lymphedema**, or from birth. This is a congenital form of lymphedema caused by a malformation of the lymph vessels or nodes. It may present itself at birth, or later in life. Often it occurs when there are other cognitive impairments at birth as well, i.e. Down’s syndrome.
What causes it?

- **Secondary lymphedema** is caused secondary to lymph vessel destruction, or lymph node removal secondary to a disease process or a surgery. Oncology care including radiation, chemotherapy, surgery, tumors, infection, compromise of the vascular system, burns, liposuction and general trauma can all be contributing factors of lymphedema.

- Lymphedema does not necessarily develop right after surgery. It can develop decades later!
Lymphedema

Primary Lymphedema
The result of a congenital malformation of the lymphatic system
Congenital lymphedema (presents at birth)
Lymphedema praecox (before 35 years of age)
Lymphedema tarda (after 35 years of age)

Secondary lymphedema
The common cause of lymphedema. Common causes include post-surgery, chemotherapy, radiation, after infection, blood clots, tumors, or chronic venous insufficiency

(Zuther, Lymphedema Management & Foldi, Foldi’s Textbook of Lymphology)
Lipedema: Cause unknown-usually corkscrew vessels present in the groin and leg lymphatics that trap fat molecules. Signs and symptoms include tenderness, ease in bruising secondary to fragile blood vessels being over stretched from corkscrew effect, typically pear shaped, size is symmetrical and the feet are spared. Often present with medial knee bulges. Often begins after hormone changes, i.e. pregnancy, menopause, or during pregnancy. (Foeldi, pp. 418-427), (Zuther, pp. 87-89)

Usually only women affected. 11% of population according to a 2001 study. (Foeldi, p. 418)
Lipedema

- Psychosocial Implications: depression, may have obesity secondary

- Very tender to touch, so may have to build their tolerance up to compression

- Hereditary component that has been found to be reversible if found early.

- Koln, Germany: Viavital Verlag. Lymphedema Diagnosis and Therapy.
Lymphatic Swelling

- Lymph fluid is rich in protein making the edematous area very thick and heavy feeling. (Zuther, p. 3)
- Treatment is necessary to not only move the fluid out of the area, but also the protein. If it is not treated, over time, the lymphatic vessels will stretch out permanently and external compression and treatment will be necessary for a lifetime to maintain proper pressure in the valves to move fluid more normally.
Lymphedema

- Lymphedema can cause keratin and fibroblasts to form at an increased rate. This can lead to fibrosis, a hardening of the dermis layer, hyperpigmentation and deposits of fatty tissue in abnormal areas.

- This is a condition of chronic nature, and therefore patients are at risk for infections such as cellulitis due to the edema exerting pressure on the tissues and causing cracks, allowing bacteria in, or compromising skin when bumped or scraped.
Why do we need to treat edemas?

- **Short-term:** We treat any decrease in ROM, pain, infection risk, venous obstruction, and decrease in functional activities such as gait, reaching, etc.
- **Secondly,** when the vessels are full of this protein-rich fluid, there is less oxygen in the vessels, decreasing the rate at which wounds, surgery sites and skin ulcerations heal. This also puts the patient at risk of cellulitis, or infection of the bloodstream.
- **Chronic edema will lead to a permanent change in vessel size due to hysteresis** (1, p.67)
Lymphedema

- Causes-25% of Breast Cancer Survivors currently get lymphedema and up to 40-60% of patients with inguinal lymph node removal.
- Prevention is KEY! The rhyme and reason. Research findings now indicate that one to three sessions of MLD/education in self massage and skin care precautions can decrease the risk of incidence.
- Prevention is of utmost importance as lymphedema is a chronic condition that cannot be cured, only managed.
Alternate forms of treatment for edema (good and bad)

- Lymphedema pump—often considered a method of last resort (outdated). Can create a dependency on the pump for treatment as if moves the fluid, but not the protein component of the lymph. Also increases the risk of genital edema
- Elevation
- Surgery
- Diuretics
- Bandaging
Alternate forms of treatment for edema (good and bad)

- Low compression support hose. “TEDS are for BEDS”
- Doubling up on lower compression hose to increase the pressure tolerated, but aid in the ability to don them
- Compression Garments
- Exercises, standard PT/OT/MT, ROM
- Self massage
- Reid sleeves, Circ aids, Velcro wraps
Why do we need to treat edemas?

- Potential for ulcerations, dermatological changes resulting in infections (local and general)
- A change in tissue quality results from chronic swelling (fibrosis)-elephantiasis
Signs and Symptoms of Lymphedema in Post Oncology Care Clients

- **Subjective differences:** Many people report the first signs and symptoms of lymphedema as a feeling of tightness, or heavy feeling, decreased flexibility in the joints, and clothing or jewelry fitting tightly. Some patients only report strange sensations such as tingling or a crawling feeling on the skin.

- **Objective differences:** Measureable change
Secondary Lymphedema

- This is the most commonly seen lymphedema
- Begins as a result of another surgery or trauma
- Most commonly after CA treatment: Node removal, radiation, broken bones, burns.
- Blockage of vessels due to tumors, pregnancy and scar tissue, cellulitis
- Venous failure
Stages of Lymphedema

Stage 0 (latency)

Stage 1 (reversible)

Stage 2 (spontaneously irreversible)

Stage 3 (lymphostatic elephantiasis)
Stages of Lymphedema

Stage 0
- Pitting edema, elevation usually reverses swelling
- Reversible

Stage 1: Pitting edema, no fibrosis, elevation usually reverses swelling

Stage 2: Some hardening, pressure does not cause it to pit, will become fibrotic and thus irreversible if not aggressively treated

Stage 3: Elephantiasis, severe fibrosis, irreversible
How is Lymphedema Diagnosed

- X-ray with dye
- Lymphscintigraphy
- MRI
- CT

Symptomatic
Foeldi
pp. 460-472
Types of Edema Continued

- **Vascular/Venous insufficiency**: Signs and symptoms: achy feeling at the end of the day, better with elevation, darker in color when on the ground/floor. Staining of the LE’s, most common in LE’s. Skin ulcers and cellulitis are a common risk that is decreased with compression therapy.

- **Arterial insufficiency**-pain with compression (contraindicated for MLD)

- **Myxedema-Related to Thyroid disorders**

- **PMS, medication abuse**

- **Combined form-phlebo-lymphedema, venous insufficiency on top of lipedema**.
International Recognized Forms of Treatment for Lymphedema

- MLD / CDP Treatment Includes:
  - MLD
  - Compression Bandaging if necessary
  - Skin care
  - Self care education
  - Remedial exercise
  - Compression garments with follow up/new garments every 6-12 months
Barriers to Obtaining Treatment

- Lack of trained therapists
- Cost
- Lack of Insurance Coverage
- Lack of education by physician offices
- Lack of support
What You Can Do?

Inform.....survivors about the condition and that they can ask their physicians/nurses for more information

Ask......clients upon survey about their experience with lymphedema

Educate.....those who ask questions

Supply.....Resource information
Teaching Lymphedema Prevention

- **Skin Care** - Meticulous skin care is imperative for patients at risk for lymphedema. Low pH creams or lotions without fragrance are most often recommended. Eucerin, Aquaphor, Curel, etc. Wash, soft debridement, clean between toes, cream vs. lotion.

- **Wounds** (protocol for dressings)

- **Diet** - The recommended diet is a generally balanced diet of high fiber, fruit, vegetables, low fat, and low salt. Obesity is a factor in increased incidence of lymphedema.
Decongestive exercises for lymphedema

- Order of the exercises
- Bouncing on Swiss ball, rebounding
- Swimming
- AROM, aerobics (not to the point of exhaustion)
- Strengthening exercises
Marketing Your Program

- How to present the information: Create your marketing in an educational brochure format. Include your contact/clinic information. Often it will be the patient that calls for more information. The physician will be more likely to give it out if it is something active that the patient can do for himself/herself like exercise or self-massage, than simply referring them to a therapist for “massage.”

- Begin a lymphedema support group or ask to speak at your local cancer center. Many oncology offices have support groups already and are always looking for speakers.
Marketing of Lymphatic Treatment

- Target audiences
  - Oncologists: Focus on lymphedema and scar tissue softening due to radiation
  - Vascular Surgeons: Chronic swelling, scar tissue due to popliteal bypass grafting, vein stripping.
  - Vein Disorder specialists: above
  - Dermatologists: Scars, acne, eczema, wounds, burns
  - Podiatrists: Diabetes related disorders, wounds, chronic venous insufficiency, lymphedema
  - Primary care physicians: Chronic Fatigue, Fibromyalgia, Compression therapy is a possibility for pregnant women, chronic pain diagnoses
  - OB GYNs: Edema due to pregnancy
  - EENTs: Facial and neck sequences are wonderful for chronic sinus and ear infections
  - Plastic Surgeons: see dermatology
  - Spa, Drug treatment centers, holistic practitioners
Documentation for optimum reimbursement

- Evaluation: Can use 700 for Medicare patients, or create a lymphedema/Integrated Lymph Drainage Therapy evaluation.
- Important points to include on evaluation:
  - Objective measurements and pictures
  - Diagnostic Indicators
  - Pain scale, is pain constant or intermittent?
  - What does this condition prevent you from doing in your day-to-day activities?
  - Do you smoke or drink?
  - Patient’s weight
  - What were your first indications that something was not right?
General medical history, be sure to ask about thyroid disorders, renal and heart function, current or previous cancers and any abdominal surgeries. Ask about home situation-you will need to take this into account when creating the patient’s home program.

Education is key for the patient! They must learn proper skin care and precautions to keep lymphedema from occurring or from the condition from being exacerbated.

- Pain, function
- Decreased edema necessary to reduce pain, leading to increased functional activities.
- MLD/CDP therapy necessary to reduce the risk of infection, cellulitis, wounds/skin compromise and edema.
Evaluating Lymphedema Cont’d

- The patient’s goals
- ROM/Strength
- Observation. Details or photos, skin fragility, wounds, skin color, signs of infection
- Pedal pulses, sensation
- What is causing the edema?
Writing Functional Goals for Reimbursement

- Keep them functional, relate them to what their work or home activities will be.
- Focus on education as lymphedema is a chronic problem: Knowing the signs and symptoms of infection, basic education of their disorder and why it happens, independence with a home program, either exercise, self-massage, and self-wrapping.
Billing Codes

- 97001  PT evaluation (OT  97003, ST, MT)
- 97530 Therapeutic Activities –Skin care instruction, teaching proper donning and doffing of compression stockings
- 97535 Self Care Training- Self compressing bandaging
- 97110 Therapeutic Exercises-Lymphedema exercises and instruction
- 97140 Manual Therapy-Lymphatic drainage massage
Codes

- Diagnosis codes: 457.1 lymphedema, lipidema
- Phlebo-lymphedema, 457.0 post-mastectomy lymphedema syndrome
- Treatment ICD-9 Codes (Will probably change and expand with ICD-10)
  - 729.5 Pain in limb
  - 729.81 Swelling in limb
  - 781.2 Abnormality of Gait
  - 719.7 Difficulty in walking
  - 457.0 Post-mastectomy lymphedema
  - 457.1 Lymphedema other
  - 709.2 Scar conditions / fibrosis of skin
Medicare Specific Billing Guidelines

- Treatment must be reasonable and necessary to restore patient’s PLOF
- Must result from a low output failure only (not high output like CHF or Renal failure)
- A diagnosis of lymphedema by a MD, DO, CNP, CNS, midwife, or PA with specific orders for CDP-If that is the only reason you are seeing them
- Must document the need for change in function, for the self-care, or for the safety of the client. Again, not documentation of specific number of feet walked, or that they are now able to lift 5 pound weights 30 repetitions, but: Patient can now walk around her home without pain allowing her to care for her children.
Medicare Specific Billing Guidelines

- Ex: Client can now lift arms overhead without pain to complete household chores.
- Girth measurements, ROM, strength measurements are objective, but do not demonstrate change in function.
- Also, attempts at reversing the lymphatic deficit by elevation were not beneficial.
- Services should not exceed 60 minutes per treatment, 3-5x/week for one to two weeks.
- Maintenance therapy is not a benefit of Medicare.
- (Ask NAHC, 2005)
Conclusion
Clinical Practice/Case Studies
Contact Me

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- Social Media: Face Book: Lymphatic Care Specialists and Monarch Continuing Education
- Check My You Tube channel for educational videos
- Linked IN-Group is Lymphatic Education
Resources

- www.lymphedemahope.com
- www.lymphnet.org
- www.lighthouselymphedema.org
- www.elymphnotes.org
- www.breastcancer.org
- www.discount surgical.com
- www.bandagesplus.com
- www.cancer.org
- www.nci.nih.gov
- www.oncolink.com
Additional Forms/Reference Sheets
Relative Contraindications to MLD

- Edema of any systemic nature—unless you have been fully trained and certified in MLD/CDP therapy.
- Edema due to trauma and orthopedic would be indicated if client is free from all other absolute contraindications. If they are under a physician’s care currently, you would want to obtain a physician’s prescription.
- New/freshly healed skin
- Carotid stenosis (to working directly over SCM area)
- Avoid working directly over the neck if there is a history of thyroid disorder
- Menses/avoid direct work over the abdomen
- Medications: Especially chemotherapy agents for full body work
Self Massage of Upper Extremity Sequence

- This is a general routine for MLD and is a reminder of the massage routine you learned. The purpose of this routine is to increase the natural rate at which lymph fluid is moved through the system, creating a detoxifying effect. Remember these strokes are very light and slow with a dragging motion on the skin. Be cautious of the direction of your strokes.

1. **Collarbone:** Place your fingertips in the hollow above the collarbone (shrug your shoulders up to find this space). Gently, with your fingers stationary stretch the skin toward the collarbone, when you hit a soft barrier, slide fingers until they meet and release. This stimulates the lymph flow back to the blood system. Repeat 5 times.

2. **Neck:** Place your whole hand flat under each ear, gently letting them curve around the neck. Stretch the skin down, toward the collarbone. 5x

3. **Armpit:** Place your left hand with flat fingers and palm in the armpit of your right side. Slowly and gently stretch and release the skin in a half circle motion toward the heart. This stimulates the nodes and prepares them to receive fluid. 5x Repeat on the opposite side.

4. **Across the chest:** Slide/Stretch skin from the affected side to the unaffected side across chest toward the armpit that you worked in step 3.

5. **Deep breathing:** Do deep breathing exercises taught by your therapist. 5x

6. **Groin Nodes:** With hand flat over the area where the leg meets the trunk, (groin), pump in and up toward navel 5x (on affected side).
MLD Sequence of UE’s Con’t

7. **Side:** On each side, stroke from just below the each armpit down towards the groin. 5x

8. **Elbow to shoulder:** On the outside of each arm, stroke from the elbow up over the top of the shoulder into the hollow above the collarbone. 5x Repeat on the inside of the arm, to the shoulder.

9. **In elbow crease:** Place the flat of your fingers on the elbow crease. Gently press/pump upward to drain these lymph nodes. 5x

10. **Wrist to Elbow:** Stroke from wrist upward toward the elbow. Repeat 5x, front and back.

   • **Hand:** Stroke front and back of hand up toward wrist. Use fingers or fingertips as needed, depending on the size of your client.

   • **Fingers:** Front, back and sides of fingers, if they are swollen

   • **Sweep:** Sweeping strokes over the whole arm, from hand to collar- bone 5 x

   • **Clear nodes:** Clear 5 x groin nodes, armpit, and lastly the neck. OR

   • **Repeat** in reverse order
MLD LE Sequence

- **Deep Belly Breathing/Abd work**
- **Groin Nodes:** With hand flat over the crease of the leg (groin), pump in and up toward navel 5x.
- **Knee to Groin:** Starting at the knee of your right leg, stoke up the outside of your thigh toward the groin 5x. Repeat with inside of thigh and back of thigh. Stoke should be one direction toward the heart ONLY!
- **Behind the knee:** Place flat fingers of both hands behind the knee and gently stretch and release the skin in an upward fashion to drain these nodes.
- **Ankle to Knee:** Stroke from the ankle to the knee 5 x front and back
- **Foot:** Front and back of foot, 5x each
- **Toes:** Front, back and sides of toes.
- **Sweep:** Sweeping strokes over the whole leg, from foot to groin, 5 x
- **Clear nodes:** Clear 5 x groin nodes, armpit, and lastly the neck. OR
- **Repeat** complete sequence in reverse
References


References Continued


