



BY KERRY D'AMBROGIO, DOM, AP, PT, DO-MTP

Lymphatic balancing

for the orthopedic patient

Many practitioners consider lymphatic drainage to be a specialized set of techniques that do not factor into daily practice. Many believe these specialized techniques only apply to clients with lymphedema and involve extensive taping or complicated draping. This belief may have even prevented you from incorporating specific lymphatic work into your treatment. However, adding a principle based approach to balancing the lymphatic system is easier than you think and may be the key to getting lasting results for those difficult clients who are not responding to your current treatment protocol.

One of the basic tenets of osteopathic medicine in the hierarchy of healing is the principle that the movement of fluids is essential to the maintenance of health. Perhaps an even more important concept is that drainage must precede supply. Although this concept refers to the drainage of venous blood as a preparation for the delivery of arterial blood, we could also apply it to the lymphatic system and the important role it plays in tissue purification, fluid balance, immunity and digestion. Dr. Andrew Taylor Still, the father of Osteopathy, emphasized that the treatment of the lymphatic system was vital for the treatment of disease, and the maintenance of health and homeostasis. He stated, "We strike at the source of life and death when we go to the lymphatics".

Lymphatic Balancing builds on the principle based concepts of Dr. Still, while incorporating the use of gentle, rhythmical pumping techniques to encourage the healthy flow of lymph. First developed by Earl Miller DO, the lymphatic pump is a manual technique that makes the use of both long and short levers to re-establish the rhythmical flow of lymph. Practitioners can easily integrate these pumping techniques into a multitude of manual treatment approaches without the need for special draping or taping. It is a non-invasive approach in which the risk to benefit ratio is exceptional.

The Lymphatic System

The lymphatic system is made up of a network of thin tubes (lymph vessels) that run throughout the body and oval-shaped organs (lymph nodes) that collect and filter lymph. Daily, approximately 30 liters of fluid, filled with oxygen and nutrition, filters out of the capillaries and into the interstitial spaces. Of that, 27 liters returns to circulation, and the remaining 3 liters drains into the capillaries of the lymphatic system. Before draining into the lymphatic system, the fluid cleans the extracellular spaces of particulate matter, exudates and bacteria. Lymph vessels collect and filter this fluid, now called lymph, through lymph nodes

before directing it toward blood vessels near the heart, where it re-enters blood circulation. This helps to maintain normal blood volume and pressure, and prevents edema, the excess accumulation of fluid around tissues.

The proper functioning of the lymphatic system is critical to our body's ability to detoxify and regenerate tissues. The lymphatic system filters out toxins and foreign substances, recovers crucial substances that have escaped from the blood, and helps maintain a healthy immune system. If the lymph circulation stagnates due to injury or infection, toxins accumulate and cellular metabolism is significantly compromised. This results in an increase in acid and toxins within the tissues causing pain, tension, and edema. In order to promote and restore proper tissue healing and pain-free movement, these substances, along with the edema, need to quickly be removed from the interstitial fluid.

History and Development of Lymphatic Balancing

The history of lymphatic drainage techniques dates to the late 1800's when faculty at the first osteopathic college in Kirksville, Missouri began research on distribution within the vascular and lymphatic systems. In 1922, Dr. Frederic Millard DO, one of Still's students, published *Applied Anatomy of the Lymphatics* which led the way for further research and development of specific techniques aimed at treating the lymphatic system. Dr. J Gordon Zink DO expanded on the work of Millard to include the Respiratory-Circulatory model. This model places special emphasis on the influence of fascial restrictions and the importance of pressure differentials in the body cavities on the flow of venous and lymphatic return. Lymphatic Balancing builds on the foundation laid by these early Osteopaths and expands on the later work and teachings of Dr. Emil Vodder (Vodder Method), Bruno Chikly MD (Lymphatic Drainage Technique), Dr. Albert Leduc PT, PhD (Leduc method) and osteopathic lymphatic pumping techniques.

Lymphatic Balancing was designed by Dr Kerry D'Ambrogio to treat excess fluid, swelling, or lymphatic stagnation in the cranium, spine, rib cage, visceral system, and the upper and lower extremities. These techniques can be applied to a wide range of clientele within the orthopedic



> community and outcomes include the restoration of proper joint biomechanics, functional range of motion and optimal postural alignment. This gentle, hands-on approach is efficacious in the treatment of back pain, sciatica, neck pain, headaches, rib pain, upper and lower extremity orthopedic dysfunctions, swelling, and postural asymmetry.

Application of Lymphatic Balancing

Successful therapeutic intervention begins and ends with evaluation. Evaluation provides a sense of knowing and working with the source of dysfunction. At the D'Ambrogio Institute, treatment begins with a full body evaluation to assess for lines of tension from the cranium, thorax, abdomen and extremities that could be affecting the area of dysfunction. If lines of tension are found, then a Total Body Balancing (TBB) is performed to eliminate those lines of tension from other regions of the body affecting the area of dysfunction. This is followed by a specific local evaluation of the area of dysfunction to determine the appropriate local intervention. Evaluation consists of **ARTS**:

- **Asymmetry of Posture:** Evaluate the local boney landmarks for asymmetry.
- **Range of Motion (ROM):** Perform both active and passive ROM. Check for end-feels.
- **Tension Tests:** Perform tension tests on the joints and fascial glides on the tissues adjacent to the local area of dysfunction. Increased motion or restricted motion indicates joint dysfunction and decreased fascial glide indicates fascial adhesions. (Joint and Fascial Balancing Techniques)
- **Tender Point Evaluation:** Evaluate for tender points in the soft tissue adjacent to the local area of dysfunction. Increased tenderness and a jump sign indicate protective muscle spasm. (Muscle Balancing Techniques)
- **Tissue Texture Changes:** Assess the weight of the limb, tissue texture and for tension in the proximal nodes. Heaviness in the limb, boggy tissue texture and tension in the proximal nodes indicates swelling. (Lymphatic Balancing Techniques)
- **Special Tests:** Special tests are used to confirm a diagnosis or clarify a situation. There are many types of special test such as neurological, orthopedic, and visceral.



If there is asymmetry of posture and local landmarks, limited active and passive ROM, increased tension in the proximal lymph nodes, heaviness in the limb and boggy tissue texture, Lymph Balancing is indicated to treat the swelling.

Lymphatic Balancing Courses

Participants attending the Lymphatic Balancing courses at the D'Ambrogio Institute will:

- Learn how to decide if lymphatic balancing is a priority.
- Gain an understanding of the history, principles, and neuromuscular basis of Lymphatic Balancing.
- Learn the anatomy and supporting structures of the lymphatic system.
- Conduct a local specific evaluation using ARTS.
- Chart results of an evaluation and formulate a treatment plan.
- Determine the proper sequence of treating the Total Body Lesion.
- Perform Lymphatic Balancing on the nodes, vessels, tissues of the cranium, spine, thorax, abdomen, and upper and lower extremity.
- Understand the clinical importance of Lymphatic Balancing for the treatment of excess fluid, swelling, or lymphatic stagnation in relation to muscular skeletal dysfunctions.
- Integrate Lymphatic Balancing with other treatment modalities taught at the D'Ambrogio Institute.

Lymphatic Balancing is taught as three courses at DambrogioInstitute.com and can be taken in any order.

Lymphatic Balancing; Total Body Approach (LBT): This course teaches you how to perform a Total Body Evaluation (ARTS), and treat excess fluid or swelling in the body. This class teaches you a total body approach to lymphatic balancing. LB is useful place to start for new patients before performing specific LB on local regions of the body, or as preventative health care or maintenance for the patient.

Lymphatic Balancing; Local Approach - Upper Quadrant (LBUQ): This course teaches you how to perform a specific local evaluation (ARTS), and treat excess body fluid or swelling in a specific region. These include the cranium, cervical spine, thoracic spine, thorax (viscera), upper abdomen, and upper extremities (shoulder, elbow, wrist and hand).

Lymphatic Balancing; Local Approach - Lower Quadrant (LBLQ): This course teaches you how to perform a specific local body evaluation (ARTS), and treat excess body fluid or swelling in a specific region. These include deep drainage, the lower abdomen and abdominal (viscera), lumbar spine, pelvis, sacrum, and lower extremities (hip, knee, ankle and foot).

AUTHOR – Kerry D'Ambrogio is a Physical Therapist, Osteopath, Board-certified Acupuncture Physician, and author of Positional Release Therapy (Mosby). He is a 2018 National Massage Convention Presenter. Information on Dr. D'Ambrogio's manual therapy techniques and continuing education courses is available at DambrogioInstitute.com.