REAL RELIEF
Easing Carpal Tunnel Pain

A GEM OF A FACE
The Euro-Stone Facial

CHAIN REACTION
The Physics of Massage

Breast Massage
AFLOAT IN A NEW ERA OF THINKING
Debra Curties & Bruno Chikley
Breast Massage

Lymph Drainage Therapy
An Effective Complement to Breast Care

Legal and ethical issues often provide a controversial backdrop to the subject of breast massage. Further fueling the debate is the question of who exactly is qualified to perform this technique.

While there may be many schools of thought, the fact remains there is an appropriate and practical manual technique – Lymph Drainage Therapy – that can be used by trained therapists for specific conditions and indications relating to breast care.

Lymph Drainage Therapy (LDT) is a gentle, light-touch, noninvasive technique which offers qualified therapists a natural complement to their existing health care protocols. Within the context of breast care, LDT can help alleviate numerous conditions related to pregnancy, including engorgement, sore nipples (transient, chronic), plugged ducts, wounds, fissures, ulcerations, bruises and dermatitis (eczema). This therapy also can provide relief from chronic inflammation and pre- and post-surgical applications, and can be used for cosmetic applications, such as mastoptosis, scars and traumas.

Best results are obtained with accurate knowledge of the specific anatomy, physiology and related hand techniques involved so the practitioner can attune to the precise rhythm, direction, depth and quality of the lymph flow.

When studying the numerous lymphatic vessels of the breast and the pelvic organs, it becomes clear the rich lymphatic networks found in these areas are highly amenable to the light touch of LDT. For example, heavy pressure should not be applied to breast tissue. Petrissage and kneading may not only hurt, but may destroy the few suspensory ligaments (Cooper’s ligament) and elastic fibers which prevent sagging (mastoptosis). Additionally, since breast tissue is well-supplied with lymphatics but lacks sources of external compression (such as muscles or strong overlying fascia) to promote the natural lymphatic drainage found in most other body tissues, fluid has a tendency to accumulate in the breast. The light-touch specific approach of LDT provides an ideal solution to fluid stagnation.

By Bruno Chikly, M.D.

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The Lymphatic System

The physiology and pathophysiology of the lymphatic system was slowly unraveled over time by a group of scientists interested in this mysterious fluid. While medical schools only provide very basic training concerning this body system, the critical function of the lymphatic system is now more readily acknowledged as a means to improve our overall health and well-being.

The lymphatic system absorbs fluid, macromolecules, microorganisms, toxins, waste products and foreign substances from the interstitial tissue. Numerous substances (electrolytes, proteins, hormones, toxins, debris) and immune competent cells (lymphocytes, macrophages) pass through the regional lymph nodes, where this fluid is filtered, purified and concentrated.

The lymphatic flow can stagnate for many reasons, such as swelling, chronic inflammation, lack of physical activity, stress, fatigue, emotional shock, age, poorly fitted brassieres, or brassieres worn for an excessive amount of time. When lymphatic circulation slows down, the regeneration of cells becomes less effective. This condition allows toxins and proteins to accumulate around the cells, causing cellular oxygenation to decrease and tissue regeneration to diminish.

LDT practitioners can facilitate nature by stimulating the natural peristaltic contractions of the two to three layers of muscles located along the lymphatic pathways, also called lymphangions (Mislin, 1961). Stagnating fluid, toxins and wastes will be drained through the flow of lymph. During its passage through lymphatic nodes, the body will generate production of more lymphocytes to reinforce immune response and accelerate contact antibodies/foreign substances.

Advanced practitioners of Lymph Drainage Therapy are trained to interact with the fluids at different levels, from the superficial cutaneous circulation to the mucosa, muscles, tendons, periosteum and viscera. They also perform Manual Lymphatic Mapping and assess the direction of lymph flow before, during and after treatment to see if the location of lymph stagnation has improved.

Applications and Contraindications of LDT

The applications of Lymph Drainage Therapy are numerous:

- **Circulation of lymph, blood capillaries, veins, interstitial liquids and cerebrospinal and synovial fluids (indirectly) is activated.** This action helps to reroute stagnant fluid in the skin (i.e., edema, primary and secondary lymphedema), mucosa, muscles, viscera, joints, cranial sutures, periosteum, chambers of the eyes and cochlea.
- **Toxins are removed,** making lymphatic drainage especially effective in tissue regeneration. Scars, stretch marks, wrinkles and fracture, or surgical-incision sites, are improved. Many therapists also use LDT as part of detoxification and anti-aging regimens.
- **Macromolecules (proteins) are drained,** which helps to eliminate protein-rich fluid from the extracellular tissues and aid the reabsorption of edema.
- **Fats are evacuated through lymphatic vessels.** These vessels are located in virtually every area of the body where fats may accumulate.
- **The functioning of the immune system is stimulated** through increased lymph flow. The additional flow carries more antigens to the lymph nodes, thereby increasing antibody/antigen contact. This has been found to help with chronic or subacute inflammatory processes – chronic fatigue syndrome, autoimmune disease, bronchitis, sinusitis, amygdalectis, tonsillitis, laryngitis, arthritis, acne and eczema.

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'The possibility of inducing malignant modifications with manual (lymph) treatment has been excluded.' — Professor M. Földi, M.D.
Lymph Drainage

This patient complains of extreme pain and limited range of motion a few months after breast reconstruction. The scars have become hypertrophic and uncomfortable. Mapping shows numerous irregularities in lymph flow.

carcinomatous infiltrates which have already spread to lymph collectors as tumor thrombi could be mobilized by mechanical compression...Mobilization of dormant tumor cells by arm compression in patients after treatment of carcinoma of the breast remains speculative and thus far unconvincing or unfounded.

For your own protection, however, do not work on active-cancer patients if the tumor has not been removed and is not under medical control, and always check with a physician. The therapist must bear in mind that only a physician is qualified to make a diagnosis and prescribe a treatment for any of the above described disorders.

Further, when working on a client's breast, it is important for the therapist to be aware of the trust the client has given him or her. A therapist must respect and honor this trust at all times. Proper draping should always be used to provide comfort and security to the client. In addition, prior to beginning the treatment session, the client should sign a release form giving the therapist permission for breast work. This form should describe why and how this technique is applied, as well as explain the comfort level of touch between the therapist and client. It also should state a client can stop the massage for any reason at any time during the treatment process. This decision will be honored, no questions asked.

How to Achieve Optimal Results with LDT

In order to acquire the skills for an efficient LDT session, there are several points which need to be learned and observed by the therapist:

Rhythm and frequency of movements. Therapists are trying to help serve the client. They carefully listen to the clients' specific lymph rhythm and follow and enhance this natural rhythm of life. The best results can be expected if they can tune in to this gentle pulse in each part of the body.

Hand pressure. The way lymph drainage is applied often obligates therapists to change all their concepts of touch and the general overview of their practice. LDT works so subtly it may lead to a new way of approaching the body and getting information from it.

The motions for drainage should be gentle, steady and harmonious. The manual maneuvers must also be gentle enough so as not to increase filtration from the blood capillaries. The pressure should be just enough to stimulate reabsorption and the pacemaker-like motoricity of the lymphangions. Optimal pressure prevents the lymphatic capillaries from collapsing (<45 mm Hg). Too much pressure may aggress and damage the filaments of the lymphatic

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The problem in both breasts may be resolved quickly, because little scar tissue has developed (outside of the surgical scars).
LDT Applications for Gynecology and Mastopathy

Mastopathies (Breast-Related Problems)

Related to Menstrual Cycles

- Breast pain (mastodynia, mastalgia or mammalgia)
- Swollen breasts

Related to Pregnancy and Breast Feeding

- Engorgement
- Sore nipples (transient, chronic)
- Inflammation/infection: e.g., mastadenitis, mastitis, yeast infections, infected Montgomery's glands
- Milk stasis — plugged ducts, filled ducts, plugged nipple pores
- Wounds (nipples, areola, breast), fissures, ulceration, bruises, hemorrhage
- Dermatitis — eczema
- Stretch marks

Nonmalignant Lumps

- Many nonmalignant lumps may resolve quickly with LDT

Breast Implant Problems

- Acute or subacute phase, chronic phase

Cosmetic Applications

- As a complete or partial treatment in connection with mastopostosis, surgery, scars, traumas.

Ominous Signs Suggestive of Breast Cancer

Cancer diagnosis should be made in a clinical setting. The diagnosis is usually made through biopsy or imaging techniques, e.g., mammograms, ultrasound, MRI. The following are clinical signs suggestive of breast cancer:

- Painless lumps (Only 5%-7% of cancerous lumps are painful)
- Hard lumps fixed to the surrounding tissue, rapidly increasing size, no change in response to hormonal cycles
- Alterations in the skin: “peau d'orange” (orange-peel appearance), eczema of the nipple, unexplained lesions, unexplained skin breakdown, skin ulceration
- Changes in breast contour, breast thickening
- Nipple discharge, especially bloody or dark brown (About 5% of these are of malignant origin)
- Nipple retraction
- Inflammatory signs — redness of the skin, pain, swelling
- Breast varicosities (enlarged superficial veins)

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- The functioning of the parasympathetic system is bolstered and sympathetic tone is diminished with stimulation of the lymphatics — the “fight or flight” response. This can be very helpful in dealing with stress, depression and sleeping disorders.

- Chronic pain is reduced as the drainage alleviates tissue-fluid stagnation and possibly inhibits nociceptors (pain receptors).

- Voluntary and involuntary muscle spasms are reduced, proving helpful in cases of constipation and other muscle-related maladies. Therapists must also know the contraindications and precautions of LDT, remembering as well to use their common sense. Lymph drainage should never cause pain. If there are any doubts, practitioners need to work under the guidance of a physician. The basic contraindications of lymphatic drainage are:

- Acute infectious/early onset inflammatory disease and fever. The therapist should wait until the fever breaks or until clinical signs have clearly diminished. (This usually takes 24-72 hours if antibiotic therapy is used.)

- Serious circulatory problems such as thrombosis. If there is a risk of embolism and phlebitis, do not risk tampering with the clot.

- Major cardiac problems including acute angina pectoris and coronary thrombosis (heart attack). Lymphatic techniques may increase the cardiac load.

- Hemorrhage (bleeding). Be absolutely sure the bleeding has stopped before draining. You can, however, drain the same day to reduce hematoma.

- Malignant ailments such as an undiagnosed lump. At the beginning of the 20th century, people were afraid of the possibility of provoking metastasis in cancer that was either evolving or not under medical supervision. A few studies have been made comparing groups of cancer patients treated with lymph drainage vs. untreated control groups. The results showed no increase in complications or metastasis in the treated group. At this date, no rigorous scientific study has demonstrated the spread or severity of cancer was aggravated by lymph drainage. This notion is also shared by consensus of the International Society of Lymphology (1995): “Rare reports suggest that MLT [Manual Lymphatic Therapy] may promote metastatic disease, although, theoretically, only diffuse
Conditions Leading to Lymph Node Enlargement
(Adenopathy, Lymphadenopathy)

Infections — most common etiology

- Bacterial: staphylococcal, streptococcal, salmonella, syphilis, tuberculosis, leprosy, etc. Shaving may provoke the appearance of palpable nodes in the groin area.
- Viral: cat scratch fever, mononucleosis, measles, infectious hepatitis, AIDS, post-vaccination reactions
- Protozoal — e.g., toxoplasmosis
- Fungal

Inflammations — especially from autoimmune diseases

- Lupus
- Rheumatoid arthritis

Neoplastic diseases (cancer)

- Lymphoma
- Leukemia
- Metastasis

Other

- Sarcomas
- Amyloidosis
- Hyperthyroidism
- Diseases caused by reactions to noninfectious agents (e.g., beryllium poisoning, serum sickness)

NOTE: Inflammatory, noncancerous nodes are painful, presenting signs of inflammation, swelling, heat and tenderness. This also applies to the rare inflammatory cancer. By contrast, cancerous nodes are usually firm, but not tender. However, cancer can manifest in an inflammatory form in rare cases. Inflammatory breast cancer (IBC), for example, is an uncommon (3%-6%), but usually fast-growing form of breast cancer. The inflamed breast can present skin which is red, swollen and hot, sometimes accompanied by a pout d'orange dimple, itching or pain.

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capillaries and the breast tissue. It cannot be emphasized enough that in cases of edema and lymphedema, the touch must be very light.

The average pressure used is usually around 33 mm Hg, or 1 oz./cm², which is about 8 oz./in². This can be thought of as a "feather touch." The pressure of the superficial drainage is barely the weight of a nickel or a dime. The pressure to be applied depends on the client, the area being worked on (e.g., pressure for the breast tissue is lighter than that for the legs) and the pathology (e.g., lymphedema or inflammation).

Direction of flow: Manual Lymphatic Mapping (MLM). Whatever lymph territory the therapist is working on, the lymph must be sent to the group of nodes responsible for drainage of that area. MLM usually gives accurate information concerning the direction of lymph flow.

Manually assessing the lymphatic rhythm and direction requires time and dedication. Without previous training, it may seem totally impossible to feel such a subtle component of the lymph circulation. It is recommended therapists new to this method first develop their skills for assessing the rhythm of the lymphatic flow. With training and practice, most are able to attain the sensitivity required to evaluate the rhythm. They are then are able to determine the specific direction of lymphatic flow. In my experience, more than 90% of participants in the second-level LDT workshop are able to meet the challenge of manually finding the specific lymphatic pathways in an unknown lymph territory or lymphotome. Students repeatedly find answers which are consistent with superficial or deep lymphatic circulation as shown on anatomical charts.

While the technical means for measuring the accuracy of client mapping in a noninvasive and scientific way are not yet available as of the writing of this article, some investigations are currently underway using protocols to help measure and document this
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**Lymph Drainage**

**Hand techniques.** Remember, wrists are the best indicators and activators of movement.

**Duration of movements.** The sequence of movements (proximal to distal, then distal to proximal), the duration of a session and other observations can be properly learned only in the setting of a professional seminar.

**Contraindications and precautions** should always be learned, observed and respected.

Lymphatic drainage techniques are among the most scientifically documented, gentle and efficient hands-on therapeutic tools practiced today. They are widely utilized in hospitals and clinics across Europe and are reimbursed by Medicare in Florida for lymphedema. Because the acquired touch of Lymph Drainage Therapy is very respectful and nonstimulating, it can be used by massage therapists to effectively ease numerous breast conditions - as well as the controversies concerning massage therapists and breast care.

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**References**

**History**


**Contractility of Lymphatic Vessels in Humans**


**Lymphatic Vessel Regeneration**


**General**


**Historical Perspective**

Frederick R. Millard, D.O., Toronto, Ontario (1878 - 1951)

Graduated from the osteopathic college in Kirkville, Mo., in June 1900 with William G. Sutherland, who would go on to be the founder of cranial osteopathy. Millard's first ideas pertaining to lymphatic therapy came around 1904. He used the term "lymphatic drainage" for his manual technique and published a few articles. In 1922 he published Applied Anatomy of the Lymphatics. He was founder and president of the International Lymphatic Society and editor of the Lymphatic Research Society Journal.

**Emil Vodder (1896 - 1986)**

A Danish massage practitioner and doctor of philosophy (1928), Vodder was also motivated to work with the lymphatic system. He was working in Cannes, France, between 1932 and 1936, in his physiotherapy institute. Many of his patients suffered from chronic sinusitis and diffuse acne. He had the insight to "drain" these areas toward the neck and later realized he was working with lymphatic pathways. Vodder was not an M.D., a physical therapist or even a massage therapist. (In France, the practice of massage therapy is restricted to registered physical therapists.) He was a doctor of philosophy (1928, Brussels).

Initially, Vodder revealed his technique at cosmetology meetings in Paris (1936). Since his technique was advanced for the time, he had difficulty proving its efficacy and safety. At that time, scientists were afraid bacteria and toxins would spread from the lymph system throughout the body. So initially there was little acceptance of Vodder's work by scientists. It was not until 1967 that a German physician, Johannes Asdorff, scientifically tested the technique in his clinic on 20,000 patients and established its medical effects, its indications and its contraindications.

**Bruno Chikly**

Lymph Drainage Therapy (LDT) was developed by Bruno Chikly, a French physician currently living in Arizona. LDT further improved on some of these techniques. It is the first modality to train practitioners to attend manually to the specific rhythm, pressure, quality and direction of the lymph flow. Practitioners are trained to perform a full-body lymphatic diagnosis, which consists of "mapping" the superficial and deep lymphatic pathways with their hands to assess the specific directions of lymph flow and areas of congestion and fibrosis before, during and after treatment (Manual Lymphatic Mapping). In this manner, therapists can manually determine the most efficient alternative pathways to use in the presence of fluid stagnation.

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