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Applications of Pre- & Post-Surgical Lymph Drainage Therapy

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Pre- and post-surgical patients can benefit from lymphatic drainage in a variety of ways. If you haven't yet encouraged your clients and their physicians to incorporate these techniques into their recovery plan, you have overlooked a very valuable service.

In Europe, lymphatic drainage is commonly prescribed by physicians and is widely available in hospitals to promote healing as well as provide a more comfortable recovery after surgery. But that wasn't always the case. While lymphatic drainage was initially developed there by Emil Vodder in the early 1930s, it took 30 years until the technique was taken seriously by the medical profession. It was only after Dr. Johannes Asdonk, a prominent German physician successfully tested the techniques of lymphatic drainage on 20,000 hospital patients to verify its effectiveness, measure its efficiency, and find its indications and contraindications that the method became widely used.

Today, as a result of enhancements to the traditional technique, lymphatic drainage has reached yet a new level of effectiveness and efficiency. By incorporating the most advanced scientific data on lymphology with whole-body healing values and direct listening techniques, we have been able to make this work more precise. The method, Lymph Drainage Therapy SM (LDT), is unique in that we teach professionals how to palpate the lymphatic flow. As they develop their skills, they can then identify the rhythm, direction, and quality of the lymph. Advanced practitioners will be able to precisely map the lymphatic flow to find alternate pathways for drainage.

LDT has become a valuable technique because the lymphatic system has a tremendous impact on health. The main actions of lymphatic drainage are to stimulate the circulation of the lymphatic flow and, indirectly, the blood; the immune system (the humoral as well as the cellular immunity), and the autonomic nervous system. (The parasympathetic nervous system provides relaxation and antispastic effects, while the constant stimulation of the C-fiber mechanoreceptors contribute inhibitory effects.)

For clients facing surgery, lymphatic drainage offers myriad benefits. For optimal results, it is recommended that lymphatic drainage be applied for one or two sessions prior to surgery. This process drains toxins and stimulates the immune system and the autonomic nervous system (the parasympathetic tone). It is important to drain and stimulate the lymphatic system before it is inhibited, and possibly in spasm, due to the trauma and the medication used in surgery. It is much more arduous to drain the lymphatic system for the first time post-surgically. Surgeons also find it easier to make the incision through clean, well-drained tissue, particularly for any type of esthetic surgery.

Lymphatic drainage can be applied as soon as 24 hours after surgery—as long as there are no contraindications (especially infection)—with the approval of the physician. Therapists likely will need to explain the lymphatic drainage procedure to the surgeon. It's vitally important that you work far enough from the scars to eliminate the possibility of mobilizing them. Even if the work is done distally, we know that a "vacuum action" will be applied to the lymphatics (Pecking, France). For example, working on the nodes and vessels of the upper thigh may greatly affect the lymphatic circulation of a knee surgery and will be safe for the scar.

After the surgery, the lymphatic pathways will be very different. Studies have shown that it takes between seven and ten days for the natural and functional continuity between the lymphatic vessels to reestablish (Lievens, P., et. al., Annales de Kinesitherapie, 1977, 4, 3-7). The lymphatic vessel regeneration is 100 percent restored after 14 days; vein regeneration occurs after 12 days. No experiment to date has proven the possibility of lymphatic node regeneration.

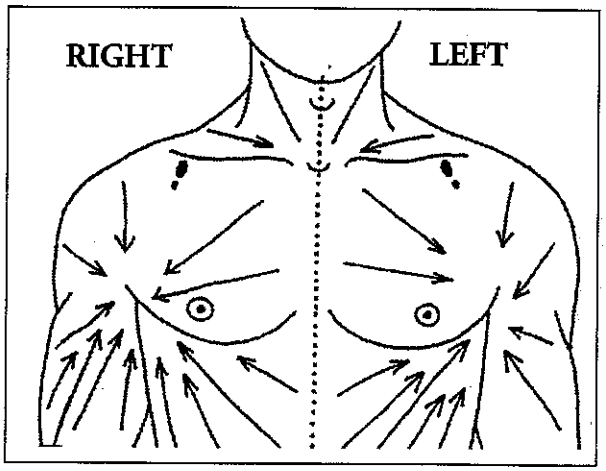

Fig. 1: Anatomy of the superficial lymphatic circulation of the chest.

Fig. 2: Shown is the mapping done by the practitioner of the direction of the superficial lymphatic circulation. The melanoma scar is six months old.

The use of lymphatic drainage after surgery helps prevent infection by releasing toxins and macromolecules, while stimulating local immunity. It also can alleviate spasms and pain by stimulating the parasympathetic system. The detoxification properties are particularly useful to remove medication and counteract the effects of immobilization in bed. Lymphatic drainage also stimulates fluid circulation and urination.

Perhaps the most significant benefit of applying lymphatic drainage post-surgically is to prevent or alleviate post-surgery edema. Swelling can cause pain, promote infection and distort features, particularly in facial surgery.

Lymphatic drainage also has been shown to improve the scarring process (Godart, S., "Lymphatic regeneration after second degree burn," *Progress in Lymphology,* 1975/ Hutzschenreuter, P .O. and Brummer, H., "Manual Lymph Drainage used for Scar Healing," University of Ulm). This occurs as local circulation and immunity are enhanced, growth of impaired lymphatic vessels is stimulated, and the release of local toxins helps tissues heal faster.

The scarring work (this can also be applied to stretch marks) should begin as soon as possible, and usually requires a great deal of time and patience. There are two methods you can use. You can drain just outside of the scar, called centrifugal drainage, toward the adjacent mother nodes of the territory. The mother nodes are a group of lymphatic vessels responsible for the lymphatic drainage of a particular area. Using another method, you can add drainage towards the interior of the scar tissue, called centripetal drainage, in order to nurture the tissue.

It should also be noted that the lymphatic pathways can regenerate only one millimeter through fibrotic tissue →

Fig. 3: This method stimulates the axillary nodes bilaterally

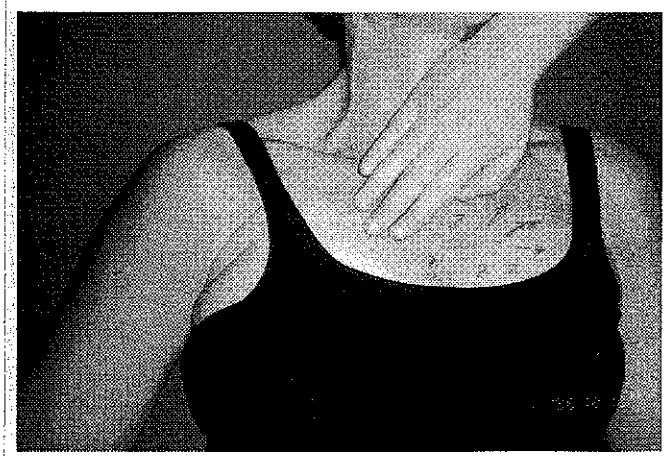

Fig. 4: Here, the practitioner uses local flat hand techniques to monitor the quality, direction and depth of the lymphatic flow, as well as to stimulate its rhythm.

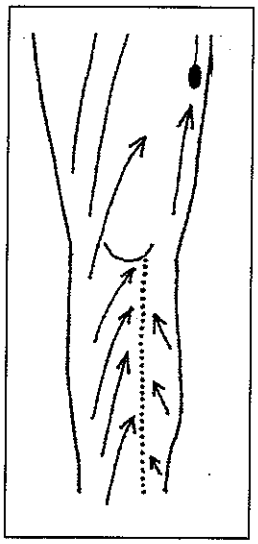

Fig. 5: Anatomy of the superficial lymphatic circulation of the left lower extremity.

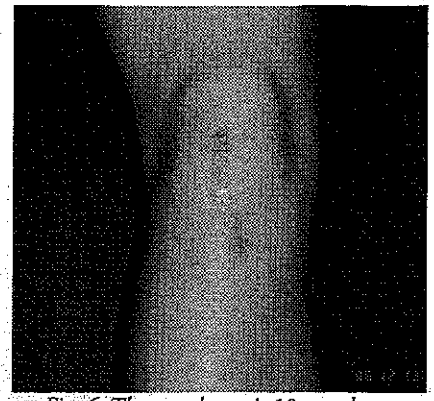

Fig. 6: The scar shown is 10 months post-surgery on the anterior cruciate ligament.

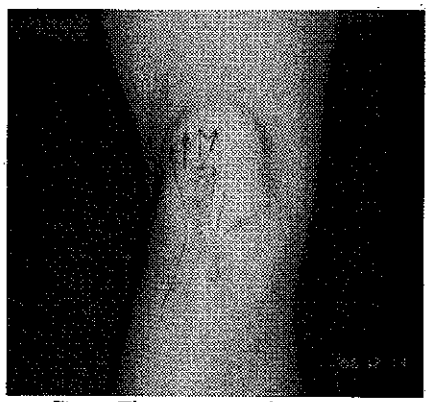

Fig. 7: The practitioner has mapped the direction of the superficial lymphatic circulation. This is done at the beginning of the first session, after the practitioner has checked for swelling, inflamed or painful areas.

Fig. 8: Follwing the 10 points for maximum results, the practitioner works retrograde from distal to proximal. Here the practitioner is stimulating the flow in one of five locations of the superficial and deep inguinal nodes or "mother nodes." The mother nodes are the nodes responsible for the drainage of a specific lymph territory or lymphotome.

Fig. 9: The practitioner continues to work the lymphatics retrograde on the capillaries and collectors of the thigh. In this way, he creates a vacuum action, affecting the lymphatic circulation in the scar area as documented by Pecking, France.

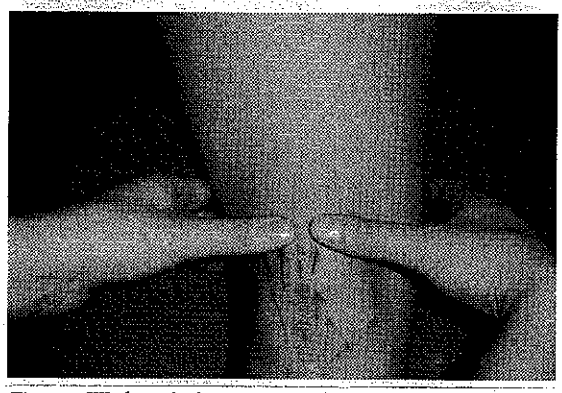

Fig. 10: Work with the scar using the pads of the thumbs or fingers.

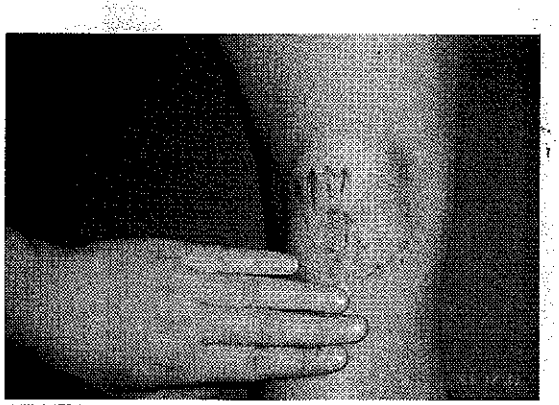

Fig. 11: The practitioner works proximal to distal, stimulating the lymphatic flow back to the inguinal nodes.