

Manual Lymph Drainage (MLD) *(Vodder Technique)*

Worksheets for Klose Training & Consulting, LLC Lymphedema Certification Course



Objective:

To provide a step by step, easy to follow guide for learning MLD techniques and sequences required to treat unilateral, medically uncomplicated lymphedema of the upper and lower extremities.

Overview

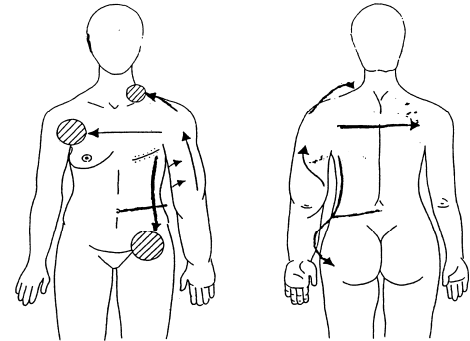
MLD Treatment Sequence for Unilateral, Secondary Lymphedema of the Upper Extremity (UE)

This example describes a patient with left UE lymphedema caused by modified radical mastectomy with removal and/or radiation of the axillary lymph nodes.

Objective: To provide an introduction of the steps needed to treat unilateral, secondary, medically uncomplicated lymphedema of the upper extremity. Each step will be described in detail on the following pages.

Neck and abdominal treatment

1. Perform neck sequence
2. Perform abdominal and deep abdominal sequences



Trunk preparation with patient in supine

3. Treat axillary lymph nodes with stationary circles on unaffected side
4. Perform chest sequence on unaffected side
5. Open-up sagittal watershed area across sternum
6. Establish anastomoses pathways by moving lymph fluid from affected to unaffected side (anterior axillo-axillary anastomoses)
7. Prepare inguinal lymph nodes on affected side
8. Open-up transverse watershed and lateral trunk with stationary circles
9. Establish anastomoses by moving lymph fluid from affected axilla region (lateral chest) to inguinal lymph nodes (axillo-inguinal anastomoses)
10. If indicated: treat intercostal and parasternal pathways on affected side
11. Alternate steps 6 and 9 - following "L" pattern (re-working axillo-axillary and axillo-inguinal anastomoses)

Continue trunk preparation with patient in prone (if not possible, in sidelying)

12. Perform sequence on unaffected upper trunk quadrant
13. Open-up median sagittal watershed area (between scapulae) with stationary circles
14. Establish posterior axillo-axillary anastomoses by moving fluid from affected to unaffected side
15. Repeat techniques on axillo-inguinal anastomoses on affected side (lateral trunk, same as # 9)
16. If indicated: treat intercostal and paravertebral pathways on affected side
17. Alternate steps 13 and 14 – following "L" pattern, repeat work on axillo-axillary and axillo-inguinal anastomoses
18. Treat UE

Note: Treatment of the UE is usually initiated while the patient remains in prone or side position and only after the respective trunk quadrant is decongested.

Proximal areas are treated (decongested) before MLD progresses further distally to include elbow, forearm and hand. Follow-up moves on trunk are performed to ensure adequate removal of fluid into unaffected areas.

Step #1 - Neck Treatment (supine)

Objective: Introduction to Stationary Circle and “Short” Neck Sequence as it pertains to the treatment sequence described on page 2.

General Contraindications: Acute infections, untreated congestive heart failure (CHF), acute deep venous thrombosis (DVT)

Relative contraindications: Malignant disease, renal dysfunction

Additional contraindications specific to MLD neck treatment: Cardiac arrhythmia, hyperthyroidism, hypersensitivity of the carotid sinus, caution in patients > 60 yrs. old

MLD techniques needed: Stationary circle*

1. “Short” Neck Treatment
 - a) Effleurage, 2-3 light strokes from the sternum to the acromia
 - b) Stationary circles with the fingers laying flatly in the supraclavicular fossa (SCF)
 - c) Treatment of the cervical lymph nodes. Stationary circles on lateral neck, starting below ear lobe to the supraclavicular fossa, then repeat previous step in SCF
 - d) Stationary circles in the area of the shoulder collectors, 4 sets:
 - 1st stationary circles on acromia,
 - 2nd stationary circles with fingers covering the descending part of the trapezius muscle,
 - 3rd stationary circles again on acromia (same as 1st) and
 - 4th stationary circles in supraclavicular fossa.
 All sets (repetitions) are done with flatly lying fingers, direction of circles is towards the SCF
 - e) Follow-up moves according to findings
 - f) Final effleurage



*For written descriptions of basic MLD principles and strokes refer to the MLD section in the Klose Training student manual, your MLD DVD or the Textbook of Lymphology.

Step #2 - Abdominal and "Deep" Abdominal Treatments

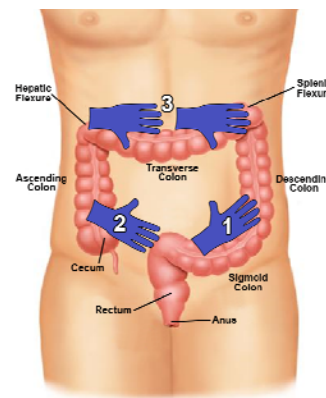
Objective: Introduction to abdominal and deep abdominal treatments as they pertain to the treatment sequence described on page 3.

Contraindications: All general MLD contraindications, pregnancy, menstruation, ulcerative colitis, diverticulitis, history of deep pelvic vein thrombosis, abdominal aortic aneurysm (AAA), Crohn's disease, radiation colitis, radiation cystitis, any other inflammatory conditions in the abdominal cavity, undetermined pain and others.

Note: A rebound (quadrant) test should precede the first abdominal treatment; The client should be positioned with flexed knees and elevated upper body. The therapist applies firm pressure with flat fingertips into each quadrant of the abdomen. If pain is noted upon sudden release, hold off with abdominal treatment until client has been seen by physician. In this case, the therapist may apply MLD to other areas of the body and replace the abdominal treatment with deep breathing.

Patient should be positioned with elevated legs (knee roll or wedge) and elevated upper body (pillow). Therapist usually stands on right side of patient.

- Effleurage, soft strokes from the pubic bone towards to the sternum, then along the rim of the thoracic cage and the iliac crest back to the pubic bone, then following the ascending, transverse and descending part of the colon
- Stationary circles on the descending, ascending and transverse colon in several sets, **pressure directed deep towards the cisterna chyli**
- Effleurage with breathing



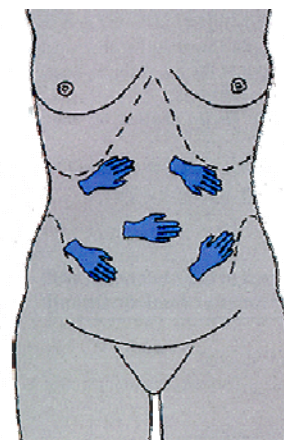
Abdominal Treatment Combined with Deep Breathing (a.k.a. Deep Abdominal)

With this technique deeper situated lymphatic structures are influenced such as the thoracic duct, cisterna chyli, lumbar trunks, pelvic and lumbar lymph nodes and the organ structures with their lymphatic systems.

The deep abdominal drainage technique is combined with respiration and applied at five different points in the abdominal area (see diagram). The patient is instructed to perform deep diaphragmatic breathing, which may require practice.

After properly positioning the hands in the abdominal area, the therapist allows the abdomen to protrude during inhalation. On the exhalation, the therapist applies gentle pressure to the patient's tolerance. During the following inhalation the therapist offers resistance until the patient is almost at the end of the inhalation. During a short pause between inhalation and exhalation the therapist shifts his/her hands to the next position. This cycle is then repeated until all points have been treated or until the patients tolerance for this treatment has been reached.

Finish with effleurage.



Steps #3-11 - Anterior Trunk Clearance with Patient in Supine

Objective: To provide a step by step introduction of the MLD sequence needed for the anterior trunk preparation for the treatment of UE lymphedema.

MLD techniques needed: Stationary circle, rotary and pump techniques

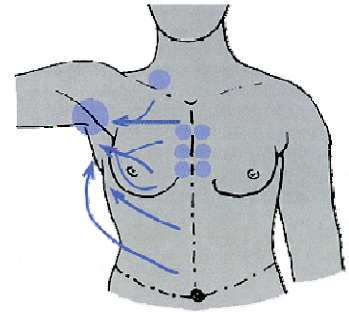
Standing on unaffected side:

3. Treat axillary lymph nodes with stationary circles on unaffected side

Standing on affected side:

4. Perform chest sequence on unaffected side (between clavicle and transverse watersheds)

- a) Effleurage, in several paths starting at the sagittal watershed towards the axillary lymph nodes.
- b) Stationary circles at the lateral aspect of the breast (near axilla)
- c) Treatment of the breast with alternating hands; the foot hand starts with the pump technique in direction of the axillary lymph nodes (1st below breast, 2nd just below or on lower part of breast tissue, 3rd on the breast just below the nipple); the head hand does stationary circles or rotary techniques from the sagittal watershed towards the axillary lymph nodes (both hands alternate)
- d) Alternating rotary strokes on rib cage below breast (between breast and transverse watershed) towards lateral, then continue with stationary circles in direction of the axillary lymph nodes
- e) Stationary circles with flat hands, from sternum (over superior aspect of the breast/chest) towards axillary lymph nodes



5. Open-up sagittal watershed area across sternum with stationary circles

6. Establish anastomoses pathways by moving lymph fluid from affected to unaffected side, using stationary circles and/or rotary techniques on anterior axillo-axillary anastomoses

Standing on affected side:

7. Prepare inguinal lymph nodes with stationary circles on affected side

Standing on affected or unaffected side as applicable:

8. Clear lateral trunk between transverse watershed and inguinal lymph nodes, then open-up transverse watershed with stationary circles

9. Establish anastomoses by moving lymph fluid from affected axilla region (lateral chest) to inguinal lymph nodes. Use alternating stationary circles or alternating pump-stationary circle on axillo-inguinal anastomoses.

10. If indicated (standing on unaffected side): Treat intercostal collectors and parasternal lymph nodes. With slightly spread fingers perform wave like movements between ribs directing pressure deep (into thorax). Then treat parasternal lymph nodes with finger pads.

11. Alternate steps 6 and 9 - following "L" pattern while standing on affected side, re-work axillo-axillary and axillo-inguinal anastomoses

Steps# 12-17 - Posterior Trunk Clearance with Patient in Prone

Objective: To provide a step by step introduction of the MLD sequence needed for the posterior trunk preparation for the treatment of UE lymphedema.

MLD techniques needed: Stationary circle, rotary and pump technique

Standing on affected side:

12. Perform sequence of unaffected upper trunk quadrant (between spine of scapula and transverse watersheds)
 - a. effleurage, in several paths starting at the spine in direction of the axillary lymph
 - b. stationary circles on lateral trunk near axilla
 - c. rotary techniques starting at the spinal column working towards lateral trunk, then with alternating stationary circles in direction of the axillary lymph nodes
 - d. stationary circles starting at the spinal column (scapula) working towards the axillary lymph nodes

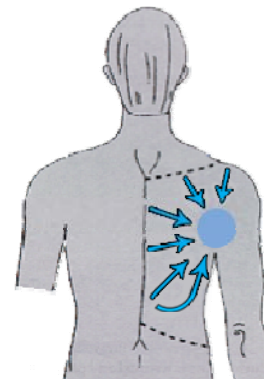


Illustration depicting MLD step #12, a-d

13. Open-up median sagittal watershed area (between scapulae) with stationary circles
14. Establish posterior axillo-axillary anastomoses by moving fluid from affected to unaffected side using stationary circles and/or rotary techniques

Standing on either side of patient as applicable:

15. Repeat techniques on axillo-inguinal anastomoses using alternating stationary circles and/or alternating pump and stationary circle. (similar to steps # 8 and 9, pg. 6)
16. If indicated (standing on unaffected side): Treat intercostal collectors and paravertebral lymph nodes. With slightly spread fingers perform wave like movements between ribs directing pressure deep (into thorax). Then treat paravertebral lymph nodes with finger pads.

Standing on affected side:

17. Alternate steps 14 and 15– following “L” pattern, repeat treatment on axillo-axillary and axillo-inguinal anastomoses

Step #18 - UE Treatment

Objective: To provide a step by step introduction of the MLD sequences needed for decongestion of the affected arm.

MLD techniques needed: Stationary circle, rotary, pump and scoop techniques.

Note: MLD on the UE should only be performed after the adjacent trunk quadrant has been adequately prepared (decongested). Also, as a rule, work prox. areas on the arm before proceeding toward distal.

Patient in prone position, standing on affected side:

- a) Repeat treatment of posterior axillo-axillary and axillo-inguinal anastomoses
- b) Alternating stationary circles on posterior/lateral scapula and anterior deltoid regions with pressure phase directed toward pre-treated areas and ipsilateral SCF
- c) Treat lateral aspect of arm with stationary circle or pump and stationary circle towards acromion and across the pre-treated watershed areas
- d) Drain medial aspect of arm to lateral aspect of arm and proceed as in previous step
- e) Treat elbow (cubital fossa and around medial epicondyle) with stationary circles and incorporate follow up moves as needed
- f) Treat forearm with stationary circles and/or pump and stationary circles and incorporate follow up moves as needed
- g) Finish prone (or sidelying) treatment by repeating axillo-axillary and axillo-inguinal anastomoses - following "L" pattern and finish with effleurage

Anterior arm treatment:

- h) Repeat treatment of anterior axillo-axillary and axillo-inguinal anastomoses
- i) Alternating stationary circles on anterior and posterior deltoid regions with pressure phase directed toward pre-treated areas and ipsilateral SCF
- j) Treat lateral aspect of arm with stationary circle or pump and stationary circles towards acromion and across the pre-treated watershed areas
- k) Treat medial aspect of arm to lateral aspect of arm and proceed as in previous step
Note: work proximal areas first before proceeding toward distal
- l) Elbow: perform stationary circles in the cubital fossa as well as thumb circles in the area of the medial and lateral epicondyles
- m) Perform scoop techniques on forearm from the wrist to the elbow
- n) Alternate pump and stationary circle on the forearm, then drain into pretreated areas
- o) Perform stationary circles with thumbs alternating or flat hand over the dorsal and palm sides of wrist
- p) Perform stationary circles with thumbs or flat hand over the dorsum of the hand and fingers
- q) If indicated, perform stationary circles in palm
- r) Perform follow-up movements according to findings
- s) Complete this part of the treatment by repeating anastomoses pathways in "L" pattern and finish with effleurage

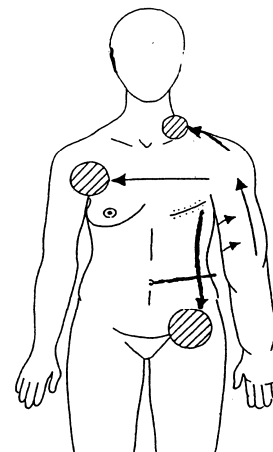
Congratulations – All steps of the UE treatment are complete!

Bringing it all together! Note: Same sequence as on pgs. 4-8 with abbreviated text.**MLD Treatment Sequence for Unilateral, Secondary Lymphedema of the UE**

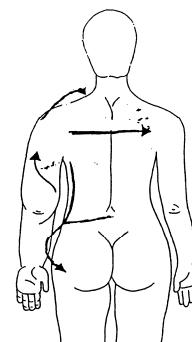
This example describes a patient with left UE lymphedema caused by modified radical mastectomy with removal and/or radiation of the axillary lymph nodes.

Trunk preparation, patient supine

- 1. Perform neck sequence**
 - a) effleurage
 - b) stationary circles at SCF
 - c) stationary circles on neck (cervical lymph nodes)
 - d) stationary circles on shoulder collectors
 - e) effleurage
- 2. Perform abdominal and deep abdominal sequences**
 - a) effleurage
 - b) stationary circles along descending, ascending and transverse colon with pressure directed to cisterna chyli
 - c) effleurage and ask patient to bend knees
 - d) deep abdominal treatment with breathing (five points)
 - e) effleurage
- 3. Treat axillary lymph nodes with stationary circles on unaffected side**
- 4. Perform chest sequence on unaffected side**
 - a) effleurage
 - b) stationary circles at the lateral aspect of the breast (near axilla)
 - c) treatment of the breast with alternating pump and stationary circle (or pump and rotary)
 - d) alternating rotary techniques below breast – then stationary circles to axilla
 - e) stationary circles over superior aspect of breast toward axilla
- 5. Open-up sagittal watershed area across sternum with stationary circles**
- 6. Establish anastomoses pathways** by moving lymph fluid from affected to unaffected side with stationary circles, and/or rotary techniques on anterior axillo-axillary anastomoses
- 7. Prepare inguinal lymph nodes with stationary circles on affected side**
- 8. Clear unaffected lower trunk quadrant and open-up transverse watershed** with stationary circles on affected side
- 9. Establish anastomoses by moving lymph fluid from affected axilla region (lateral chest) to inguinal lymph nodes** with alternating stationary circles or alternating pump-stationary circle on axillo-inguinal anastomoses
- 10. If indicated: treat intercostal and parasternal pathways on affected side**
- 11. Alternate steps 6 and 9 - following "L" pattern, re-establishing axillo-axillary and axillo-inguinal anastomoses**

**Continue trunk preparation posteriorly, patient prone (if not possible, in sidelying)**

- 12. Perform sequence of unaffected upper trunk quadrant**
 - a) effleurage
 - b) stationary circles at lateral trunk near axilla
 - c) alternating rotaries starting at the spinal column working towards lateral, then with alternating stationary circles in direction of the axillary LN
 - d) stationary circles starting at the spinal column (scapula) working towards the axillary lymph nodes.



13. **Open-up median sagittal watershed area** (between scapulae) with stationary circles
14. **Establish posterior axillo-axillary anastomoses** by moving fluid from affected to unaffected side using stationary circles and/or rotary techniques
15. **Repeat techniques on axillo-inguinal anastomoses** (alternating stationary circles and/or alternating pump and stationary circle)
16. **If indicated: treat intercostal and paravertebral pathways**
17. **Alternate steps 14 and 15 standing on affected side – following “L” pattern, repeat treatment of axillo-axillary and axillo-inguinal anastomoses**

If applicable, begin treatment of the upper extremity (this is usually initiated while the patient remains in prone or side position and only after the respective trunk quadrant is decongested)

18. **Treat posterior (lateral scapula) and anterior deltoid regions** with stationary circles, pressure phase directed toward pre-treated areas and ipsilateral SCF
19. **Drain lateral aspect of arm** with stationary circle, pump etc. towards acromion and then across the watersheds into previously treated areas
20. **Drain medial aspect of arm to lateral aspect of arm and proceed as in #18**
21. **Treat elbow** (cubital fossa and around medial epicondyle) with stationary circles and incorporate follow up moves as needed
22. **Treat forearm** with stationary circles and/or pump and stationary circles and incorporate follow up moves as needed
23. **Finish prone or sidelying treatment by repeating axillo-axillary and axillo-inguinal anastomoses** - following “L” pattern and finish up with effleurage

Continue UE treatment with patient in supine position

24. **Repeat treatment of anastomoses pathways (axillo-axillary and axillo-inguinal anastomoses)**
25. **Treat anterior deltoid and posterior/lateral scapula regions** with stationary circles, pressure phase directed toward pre-treated areas and ipsilateral SCF
26. **Drain lateral aspect of arm** with stationary circle and/or pump and stationary circles towards acromion and across the watershed into previously treated areas
27. **Drain medial aspect of arm** to lateral aspect of arm and proceed as in previous step
28. **Elbow:** perform stationary circles in the cubital fossa as well as thumb circles in the area of the medial and lateral epicondyles
29. **Perform scoop techniques on forearm** from the wrist to the elbow
30. **Alternate pump and stationary circle on the forearm**
31. **Perform stationary circles with thumbs alternating or flat hand over the dorsal and palm sides of wrist**
32. **Perform stationary circles with thumbs or flat hand over the dorsum of the hand and fingers**
33. **If indicated, perform stationary circles in palm**
34. **Follow- up moves according to findings** – complete treatment by repeating anastomoses pathways in “L” pattern and finish with effleurage

Note: Incorporate fibrous tissue techniques into sequence as indicated

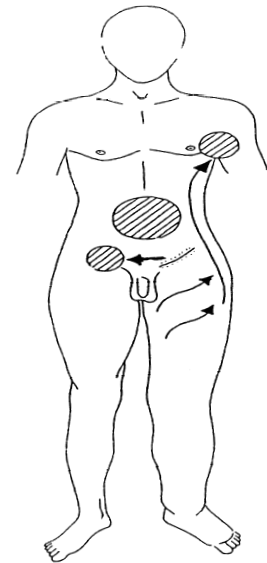
Treatment for Unilateral, Secondary Lymphedema of the Leg

(Example: Melanoma removal LE and radiation of the inguinal lymph nodes, left side)

Trunk preparation, patient supine

Standing on right side:

1. **Perform neck sequence**
 - a) effleurage
 - b) stationary circles at SCF
 - c) stationary circles on neck (cervical lymph nodes)
 - d) stationary circles on shoulder collectors
 - e) effleurage
2. **Perform abdominal and deep abdominal sequence**
 - a) effleurage
 - b) stationary circles along descending, ascending and transverse colon – pressure directed to cisterna chyli
 - c) effleurage with breathing
 - d) deep abdominal treatment with breathing



Standing on affected side:

3. **Treat axillary lymph nodes on affected side**

Standing on affected or unaffected side as applicable:

4. **Open-up lateral trunk using stationary circles from transverse watershed to axilla**
5. **Open-up transverse watershed using stationary circles on transverse watershed**
6. **Establish anastomoses by moving lymph fluid from affected inguinal region towards ipsilateral axillary lymph nodes** (alternating stationary circles or alternating pump and stationary circles on inguino-axillary anastomoses)

Standing on unaffected side:

7. **Treat inguinal lymph nodes on unaffected side**

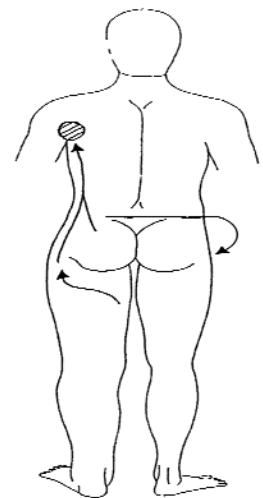
Standing on affected side:

8. **Clear unaffected lower trunk quadrant (supra-pubic area) then open-up watershed area across supra-pubic region with stationary circles**
9. **Establish anastomoses by moving lymph fluid from affected inguinal region to inguinal lymph nodes on unaffected side** using stationary circles and/or rotary techniques on anterior inter-inguinal anastomoses
10. **Alternate steps 6 and 9, following “L” pattern while standing on affected side, re-establishing inguino-axillary and inter-inguinal anastomoses**

Continue trunk preparation posteriorly, patient prone (if not possible, in sidelying)

Standing on affected side:

11. **Prepare uninvolved lumbar and gluteal regions on unaffected side** using stationary circles and/or rotary techniques
12. **Open-up watershed area across sacral region with stationary circles**
13. **Establish posterior inter-inguinal anastomoses** by moving fluid from affected to unaffected side



14. Repeat treatment on inguinal-axillary anastomoses (lateral trunk, similar to steps 3-6, pg.11)
15. If indicated: perform deep techniques i.e. paravertebral and “quadratus lumborum technique” on the affected quadrant (lumbar region)
16. Alternate steps 13 and 14 while following “L” pattern, repeating treatment of inter-inguinal and inguino-axillary anastomoses

If applicable, begin treatment of the lower extremity (this is usually initiated while the patient remains in prone or in side position and only after respective trunk quadrant is decongested)

Standing on affected side:

17. Treat lateral and posterior aspects of thigh with stationary circles toward hip then across watersheds into pretreated areas (inter-inguinal and inguino-axillary anastomoses- following “L” pattern)
18. Treat medial aspect of thigh towards lateral side and proceed as in previous step using stationary circles
19. Treat popliteal fossa with stationary circles and passive knee flexion
20. Treat calf with alternating pump or pump and stationary circles toward proximal
21. Thumb and flat finger stationary circles along the achilles tendon (or over ankle) toward proximal
22. Follow- up moves as needed, finishing prone/sidelying treatment by repeating inter-inguinal and inguino-axillary anastomoses, following “L” pattern

Continue lower extremity treatment with patient in supine position

Standing on affected side:

23. Repeat treatment of anastomoses while standing on affected side. (inter-inguinal and inguino-axillary anastomoses). This is also a good time to revisit deep abdominal breathing.
24. Drain lateral and anterior aspects of thigh with stationary circles and/or pump techniques toward the hip, then across watersheds into pretreated, edema free areas. (inter-inguinal and inguino-axillary anastomoses)
25. Drain medial aspect of thigh using stationary circles towards lateral side and proceed as in previous step
26. Knee:
 - a) pump with one hand in several sets over the anterior knee
 - b) stationary circles at the same time medial and lateral at the knee
 - c) stationary circles in the popliteal fossa with one or both hands
 - d) stationary circles at the same time below the medial aspect of knee (proximal calf)
27. Calf and foot;
 - a) pump and /or pump and stationary circle alternating on lower leg
 - b) stationary circles at the same time behind the malleoli and anterior ankle
 - c) stationary circles over dorsum of the foot and toes
28. Follow- up moves according to findings- complete treatment by repeating anastomoses pathways following “L” pattern.
29. Finish treatment with effleurage

Note: Incorporate fibrous tissue techniques as indicated.

Neck (supine)

Objective: Prepare cervical lymph nodes to receive and process lymph fluid from the head and neck areas. Pretreatment to face sequence.

1. Effleurage, 2-3 light strokes from the sternum to the acromia
2. Stationary circles with the fingers laying flatly in the supraclavicular fossa (SCF)
3. Treatment of the cervical lymph nodes. Stationary circles from the ear lobe to SCF
4. Stationary circles with fingers in front of and behind the ear (pre-and retroauricular lymph nodes), then again stationary circles in direction of the SCF
5. Stationary circles with fingers from occipital region (occipital lymph nodes) to cervical lymph nodes, then again stationary circles in direction of the SCF
6. Stationary circles in the area of the shoulder collectors, 4 sets:
 - 1st stationary circles on acromia,
 - 2nd stationary circles with fingers covering the descending part of the trapezius muscle,
 - 3rd stationary circles again on acromia (same as 1st) and
 - 4th- stationary circles in supraclavicular fossa.
 All sets are done with flatly lying fingers, direction of circles is towards the SCF
7. Follow-up moves according to findings
8. Final effleurage



Face

Pre-treatment: Neck, if indicated posterior neck

1. Effleurage, along lower jaw, the upper jaw, the cheek and the forehead in direction of the angle of the jaw.
2. Stationary circles with erected fingers in the submental and submandibular regions, from the tip of the chin in direction of the angle of the jaw, then in direction of the supraclavicular fossa
3. Stationary circles starting at the chin working towards the submental and submandibular lymph nodes (angle of the jaw) and then to the supraclavicular fossa
4. Stationary circles starting above the upper lip (between upper lip and nose) working towards the submandibular lymph nodes, then to the angle of the jaw and again to the supraclavicular fossa
5. Stationary circles on the nose towards the cheeks
6. Stationary circles starting on the cheek below the eye in several sets in direction of the submandibular lymph nodes - angle of the jaw - supraclavicular fossa
7. If indicated: working at the upper and lower lid and the eyebrows with stationary circles (one or more fingers) in the direction of the preauricular lymph nodes
8. Stationary circles starting at the middle of the forehead to the temple, then towards the preauricular lymph nodes
9. Follow-up moves according to findings
10. Final effleurage

