Early Manual Lymphatic Drainage with Secondary Edema

idditional records identified

through other sources (n = 7.)

Tiana Bridges, MOT/S, Carly Fallin, MOT/S, Emma Hilliard, MOT/S, Olivia Holmes, MOT/S, Kathryn Mullins, MOT/S, Jonathan Richardson, MOT/S, Cassie Warlick, MOT/S

 Department of Occupational Therapy, College of Health Professions, The University of Tennessee Health Science Center

 Faculty Mentor: Dr. Pamela Lewis-Kipkulei, PhD, OTD, OTR/L
 Practitioner Mentor: Holly Greer, OTR/L, CLT, ALM

Background and Rationale

Lymphedema causes a decrease in the quality of life of those who experience it (Yüksel et al., 2016) through creating more barriers to overall mental, emotional, physical, and financial well-being. Manual lymphatic drainage (MLD) has been shown to reduce the volume of lymph, which is a fluid that consists of lymphocytes and white blood cells. It is also believed that manual lymphatic drainage stimulates the superficial lymphatic contraction via stimulation of lymph systems. MLD has been consistently used in conjunction with other treatments and modalities. Further evaluation should be performed as a single intervention and preventative measure (Thompson et al., 2020).

PICO Question

Will implementation of an early manual lymph drainage (MLD) program on post-operative head/neck patients lead to a decrease in secondary edema?

Search Methodology

Databases searched: Scopus, CINAHL, Embase, PubMed, Google Scholar

("post-op head" OR neck OR cephalic OR "cervical spine") AND ("manual lymph drainage" OR "lymphatic drainage massage") AND (lymphedema OR swelling OR edema)

(head OR neck OR cephalic OR cervical OR craniofacial) AND (manual lymph drainage OR lymph* drainage) AND (lymphedema OR swelling OR edema)

("post operation" OR surgery OR radiation OR head OR neek OR cephalic OR cervical) AND ("manual lymph drainage" OR "lymphatic drainage massage") AND (lymphedema OR swelling OR edema)

("post-op head" OR neck OR cephalic OR "cervical spine") AND ("manual lymph drainage" OR "lymph drainage") AND (lymphedema OR edema OR lymphadenopathy)

(postoperative OR operation OR "after surgery") AND (head OR neck OR cervical OR oral OR throat) AND ("lymphatic dema" OR cdema OR lymphedema) AND ("lymphatic drainage" OR "lymphatic massage" OR manual)

A state of the state of th

- 4 Descriptive studies

Search Results

15 Research Articles

- 1 Literature review
- 3 Case reports
 2 Ouantitative

interventions

Main Findings and Limitations

Full-text articles excluded,

th reasons listed on th

search results form

Main Findings:

ands identified through

database searching

Records screened after duplicates remove (n = 27)

Necards excludes

abstract (n = 3)

Full-text articles assessed

for eligibility (n = 18.)

Records included in th CAT synthesis (n = 15.)

- Early MLD implementation decreases severity & volume of lymphedema
- Facial measurements reduced
- Visual Analog Scale (VAS) used frequently
- Increase in functional performance
- No reported adverse reactions
- Patient compliance yields best results
- Optimal results shown with home programs included

Limitations of Findings:

- Small sample size
- Unequal intervention times
- Difficult to compare between groups
- Lack of diversity
- Participants receiving different surgeries
 No protocol for optimal timing or duration
- No protocol for optimal timing or duration
 Potential participant bias
- Potential participant blas
 No control group for spontaneous recovery
- Lack of consistent consensus
- Lack of consistent consensu
- Current measures not quantifying subtle changes

Clinical Bottom Lines

 Early manual lymphatic drainage programs on post-operative head and neck patients led to a decrease in secondary edema experienced following procedures and treatment.

- Research recommends that MLD would be beneficial if used as a preventative or acute treatment.

 With more severe and prolonged cases, research recommends to use MLD alongside other interventions (Complete Decongestive Therapy, compression garments, cryotherapy) to achieve the most optimal results.





THE UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER

Recommendations for Implementation

After critically appraising the topic, we suggest to use this intervention of MLD as a preventive or acute treatment for secondary edema following head and neck procedures. The articles' outcomes and conclusions propose that use of MLD in conjunction with other interventions, such as complete decongestive therapy, compression garments, and cryotherapy, might lead to the most beneficial treatment of head and neck secondary edema.

We encourage clinical practitioners to proceed with caution when implementing MLD as a sole intervention because a majority of the evidence explored MLD in conjunction with other interventions. Overall, it is recommended that more research should be performed to enhance the quality of findings. More support is recommended for the rationale for inclusion of MLD as an acute treatment for head and neck lymphedema.

References and Contact Information

