

DOES DEEP TISSUE MASSAGE HAVE AN IMPACT ON DIMENSION IN THE HIPS AND THIGHS?

A Study Done By Charles W. Wiltsie III, LMT, NCBTMB

INTRODUCTION

Does deep tissue massage have an impact on the hips and thighs? It is common knowledge that massage therapy helps with circulation, muscle tone, and lymphatic drainage. It is also known that people with Lymphoedema are positively affected with Complex Physical Therapy (CPT) and Manual Lymphatic Drainage (MLD). Lymphoedema is defined as “a chronic condition with no known cure,” that, “can have profound physical and psychological impact on affected patients...Lymphoedema is swelling, usually in the extremity, which may result from an accumulation of interstitial fluid caused by impaired lymphatic drainage.”ⁱ

There is much documentation that indicates massage positively influences Lymphoedema. One of the therapeutic approaches to this is a “combination of compression, exercise and if possible, massage.”ⁱⁱ

These types of approaches are part of CPT. CPT is “a technique of manual lymphatic drainage, compression bandaging and specific physical therapy exercises.”ⁱⁱⁱ In the article, “Using Massage in the Relief of Lymphoedema,” it is stated that “massage is one of the cornerstones of treatment”^{iv} for Lymphoedema. Another study done at Slade Hospital in Oxford, England showed the “effect of massage as a stimulus to lymph flow[...] local massage significantly enhanced clearance.”^v With this information, it seemed reasonable to try to discover the exact effects of deep tissue massage techniques on healthy female participants.

The intention was to influence muscle tone, circulation, and lymphatic drainage through deep tissue massage techniques that were specific to target areas. These areas would demonstrate, or not demonstrate, that these techniques reduce dimension.

MATERIALS AND METHODS

The target areas were the lower trunk and mid to upper. These parts of the body were picked because of their relationship to waste. In other words, these parts of the body have a lot of fatty tissue, lymphatic system, and visceral organs that eliminate waste. In addition, these parts of the body also have some of the largest muscles in the body. Any effect on the muscle tone in these parts of the body would be clearly measurable, as would the effects it has on the elimination of waste in the organs and other tissue in these parts.

The women in this study were between the ages of 35 and 50. They could not be grossly overweight and could not be sedentary.

They had to be people of steady habits. They could not have had a baby within three years of the study and could not have any contraindication to deep tissue massage therapy. Each went through a three-part screening process. One hundred women were selected.

After selection, the study participants committed to 20 minutes of massage 3 times per week for 6 weeks. Every fourth session, the targeted areas on the study participants were photographed. The photographs were of the front, the right side, the back, and the left side of the targeted areas. The study participants were weighed and measured every session. The imperial system of measurement (inches) was used for the following five measurement points:

- Measurement 1 was at the navel.
- Measurement 2 was halfway between the navel and the proximal head of the greater trochanter.
- Measurement 3 was at the proximal head of the greater trochanter.
- Measurement 4 was half the distance from the proximal head of the greater trochanter and the suprapatella on the right on and left thigh.

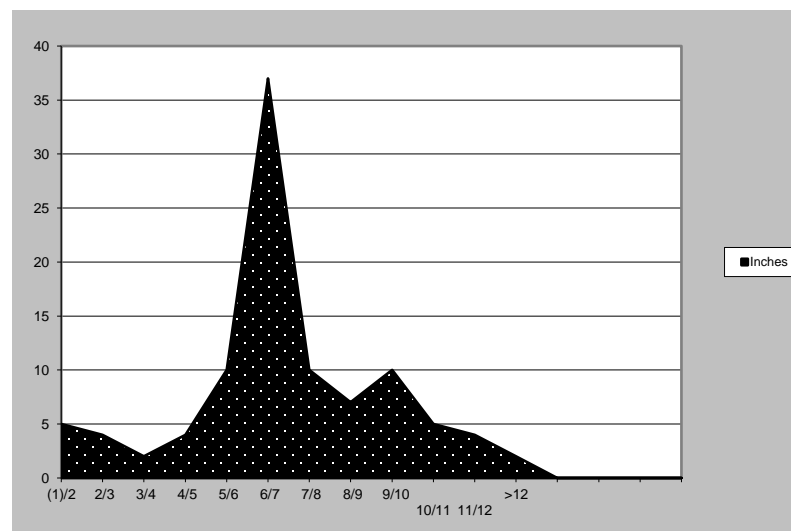
- Measurement 5 was one-quarter the distance from the proximal head of the greater trochanter and the suprapatella on the right and left thigh.

The controller was the “weigh-in” at each session. If the study participant’s weight went up or down more than half to 1 pound, an explanation was required. Also, the participant would note when she had her period or any other changes: such as diarrhea, or constipation.

These massage techniques were picked because they improve muscle tone, stimulate circulation, and affect the lymphatic system. These techniques were performed at specific times during the study period and were done the same way on each study participant.

RESULTS

Ninety-five percent of the study participants lost dimension in the targeted areas. Five percent of the study participants increased dimension rather than decreased. For the purposes of this paper, the result numbers are rounded up to the nearest quarter inch. The following table shows the average inches lost at each measurement point by the 100 study participants. Eighty-six percent of the study participants lost a total of 5 or more inches. The following graph shows the total inches lost by the study participants.



Each study participant maintained her weight for the duration of the study. Ninety-five percent of the study participants did not go up or down in weight more than one pound.

Since the completion of the initial study, other studies have been done with a variety of age groups and study periods. The results of these new studies are similar to the initial study, and therefore reinforce the findings of the initial study.

CONCLUSION

Deep tissue massage does have an impact on the hips and thighs. More importantly, deep tissue massage had an impact on the attitudes of the women in the study. At the beginning, many of the women were upset with the look of their bodies and were considering liposuction. By the end of the study, these particular women were pleased with the results. What the women noticed was how massage made them *feel*. They felt better. Many of them began visiting chiropractors, naturopaths, and other massage therapists. None of these women went for liposuction. Each

time on of us publishes a paper a few more people will understand the benefits associated with alternative modalities.

WHY DO A STUDY?

When I did this study, I had no grant money of any kind. It was my own time, my own Polaroid film, and my own late nights on the computer figuring out numbers and drawing conclusions. Why do it? It is likely each of us who does a study will have our results challenged or our methods questioned. If my results are challenged or my methods questioned, it doesn't matter. What matters is that if a study's results are challenged, that they are done so with more studies and research. Each of us who does research helps the cause of alternative health. Each time one of us publishes a paper, we help our mission, which is to forward the cause of real health.

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Lymphology 1995 Mar; 28(1):21-30

Vigorous massage in Lymphoedema also produces loosening of subcutaneous connective tissue, formation of large tissue channels and release of lipid droplets that enter the lymphatics. By this mechanism, massage helps reduce the amount of fat cells in the lymphoedematous leg.

Prevention, Nov97, Vol. 49 Issue 11, p110, 7p 2c

CDP is a non-invasive treatment method that combines specialized massage, compression bandaging, and exercise to move the excess fluid out of the limb and keep it from returning. The cornerstone of the treatment is manual lymphatic drainage (MLD). A specially trained therapist moves the accumulated lymph fluid outward and away from the affected area using short, gentle strokes that stimulate a mild pumping motion. This gradually pushes the stagnant fluid through the existing channels to where it can be re-absorbed by the body. A typical out patient treatment lasts one to four weeks and involves one or two MLD sessions a day, five days a week.

Kirshbaum M

Using massage in the relief of Lymphoedema

Lymphoedema of the arm is a complication of treatment for breast cancer. The condition often causes discomfort, reduced movement and changes in body image. Massage is one of the cornerstones of treatment.

Boris M, Weindorf S, Lasinski B, Boris G

Lymphoedema reduction by non-invasive complex Lymphoedema therapy

Oncology (Hunting) 1994 Sep;8(9): 95-106; discussion 109-110

Non-invasive complex Lymphoedema therapy (CLT), a technique of manual lymph drainage, compressive bandaging, and specific physical therapy exercises, has been utilized successfully to treat Lymphoedema in Europe and Australia. This paper reports the results of such therapy in 38 patients (16 females with arm Lymphoedema secondary to breast surgery, 18 patients with unilateral lower extremity Lymphoedema, and 4 individuals with bilateral leg disease) for 1 month. Reduction of edema averaged 73% among the patients with arm disease, and 88% among those with leg Lymphoedema of 80% improved to 86%. We conclude that CLT significantly and safely reduces Lymphoedema. Reductions not only are maintained after the initial therapy but may increase in magnitude.

Franzeck UK, Spiegel I, Fischer M, Bortzler C, Stahel HU, Bollinger A

Combined physical therapy for Lymphoedema evaluated by fluorescent microlymphography and lymph capillary pressure measurements

Prof Nurse 1996 Jan11 (4): 230-2

The treatment of patients with Lymphoedema is still controversial. Combined physical therapy with manual lymph drainage and compression therapy is most frequently used to reduce lymphatic leg swelling. However, objective evidence is rare that this empirical form of treatment has a scientific basis. In a prospective study fluorescent microlymphography and pressure measurements in cutaneous lymph capillaries were used to assess objectively the effect of combined decongestive physical therapy on abnormal microlymphatic dynamics in Lymphoedema. 12 patients with primary and secondary Lymphoedema were studied before treatment, after 2 weeks of intensive physical therapy and 3 months of continuing compression and ergotherapy. After 2 weeks of intensive manual lymph drainage and compression bandaging (phase 1) microlymphatic hypertension (12.8 \pm 5.7 mm Hg) was significantly ($p=0.01$) reduced to a mean lymph capillary pressure of 5.0 \pm 4.5 mm Hg. More than 3 months later after continuing compression lymph capillary pressure (3.2 \pm 5.2 mm Hg) was still significantly ($p=0.03$) reduced...Combined decongestive physical therapy is an effective treatment for Lymphoedema which results in a normalization of microlymphatic hypertension and an improvement of the clinical appearance.

Mortimer PS

Therapy approaches for Lymphoedema

Angiology 1997 Jan; 48 (1): 87-91

Lymphoedema, regardless of etiology, is essentially incurable but different therapy approaches exist which serve to contain swelling. The objectives of treatments are to reduce swelling, restore shape, and prevent inflammatory episodes, e.g., recurring cellulites. There are essentially three main approaches to Lymphoedema treatment: physical therapy, drug therapy, and surgery. Any edema arises from an imbalance between capillary filtration and lymph drainage. The principle of physical therapy is to a) reduce excessive capillary filtration and b) improve drainage of interstitial fluid and macromolecules from congested regions to normally draining lymph node sites. This achieved through a combination of compression, exercise, and if possible, massage.

Mortimer PS, Simmonds R, Rezvani M, Robbins M, Hopewell JW, Ryan TJ

The measurement of skin lymph flow by isotope clearance – reliability, reproducibility, injection dynamics, and the effect of massage

The measurement of skin lymph flow was investigated using an isotope clearance technique (ICT). Multiple lymph flow determinations were undertaken in the skin of anaesthetized large white pigs to test for reproducibility, ascertain the most suitable tracer, study the influence of injection dynamics, and observe the effect of massage as a stimulus to lymph flow. Blood clearance of tracer was also investigated. Results demonstrated that lymphatic clearance is a mono-exponential function with good reproducibility under controlled laboratory conditions. ^{99m}Tc-colloid (TCK17 Cis) compared favorably with ¹³¹I-human serum albumin as a tracer and both performed better than colloid gold (¹⁹⁸Au). Lymph flow was significantly faster in one pig than in the other...Neither injection volume nor needle tract backflow of tracer influenced results, but local massage significantly enhanced clearance. Escape of ^{99m}Tc-colloid by the blood was negligible. These results indicate that skin lymph flow can be reliably measured when conditions are controlled. Extrinsic factors such as massage strongly influence lymph flow.

