

# The effect of reflexology on secondary lymphoedema of the arm

## *"I feel like I've got my arm back"*

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**Background:** Breast cancer is the most common cancer in the UK. Following medical treatment approximately 20% of breast cancer patients suffer lymphoedema of the arm and may experience psychological or emotional difficulties due to altered body image (Mackereth & Carter 2006). Research suggests that cancer survivors with lymphoedema are more disabled and experience a poorer quality of life and more psychological distress than survivors without lymphoedema (Bernas et.al.2010, Pyszel et.al. 2006, Ridner 2005). There is a need for further research into a range of physical therapies for the management of lymphoedema.

Reflexology is a physical therapy focusing on the feet. Practitioners use specific pressure with thumb, finger and hand techniques to stimulate these reflexes on the premise that this effects a physical change in the body. Anecdotally, cancer patients suffering from lymphoedema have reported positive effects on the swollen arm after reflexology treatment.



Figure 1. Swollen arm as a result of lymphoedema after breast cancer treatment

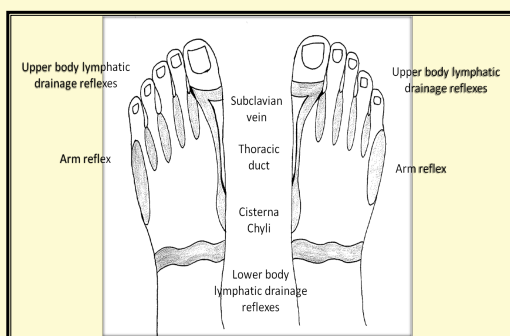


Figure 2. Position of main reflex points of the foot, thought to relate to the lymphatic system.

### Method

As part of an undergraduate project, six participants with unilateral secondary lymphedema were recruited from a South Wales cancer-care organization. The participants received four consecutive weekly reflexology lymph drainage (RLD) treatments. Limb Volume Circumferential Measurement (LVCM) was the primary outcome measure used. This method is widely used for calculating arm volume (NHS 2008). Measure Yourself Concerns and Wellbeing (MYCaW), was used to gather subjective data (Patterson et.al. 2006). LVCM and MYCaW measures were taken at baseline, the intervention stage, and at follow-up (three weeks post-intervention).

### Results

Positive trends were observed on both outcome measures for all six participants. As a group, the results indicated a statistically significant reduction in arm volume, from baseline to follow-up on LVCM ( $t=6.93$ ,  $df=5$ ,  $p=0.001$ ). MYCaW mean profile scores from baseline to follow-up also showed a significant improvement ( $Z=-2.207$ ,  $p=0.027$ ). The results were supported by qualitative data reported by participants.

### Qualitative comments

*"I feel like I've got my arm back"* Participant 6

*"My fingers are more flexible, I'm able now to grip objects and make a fist"* Participant 5

*"Not having to go up an extra size is fab"* Participant 2

*"My right arm is much lighter now. I had a lot of fluid at a pocket underarm and this too has lessened. Everything I struggled with, clothes, hobbies and driving are no longer a problem. Not embarrassed to take a long sleeved cardigan off and wear short or sleeveless blouses, which has given me my confidence back".* Participant 1

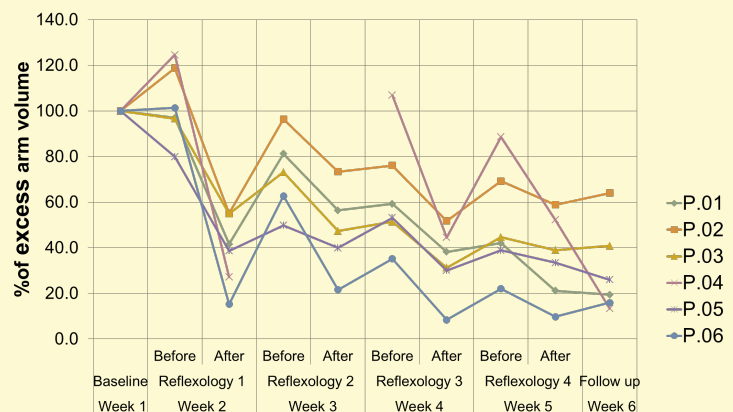


Figure 3. Overview of changes in the percentage of excess volume in the swollen arm

**Conclusion:** Findings of this exploratory study suggest that RLD (Reflexology Lymphatic Drainage) may be helpful in the management of secondary lymphoedema. A more robust research design is needed to test for a causal link between the application of reflexology and possible outcome benefits.