

## The effect of physical therapy equipment on treatment of lymphoedema

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**Introduction:** Lymphedema is the progressive swelling of tissue due to inadequate lymphatic function which complicates the patients' quality of life. Although some previous authors stated that there was no cure for lymphoedema, our observations revealed that early management with the help of PM&R had yielded significant improvement to the patients.

**Aims:** The aim of this study was to check the conservative treatments available for lymphoedema and to demonstrate the role of the effect of shock waves and lymph drainage with some equipment in lymphoedema management.

**Method:** Sixty patients with Lymphoedema participated in the study. The sixty patients completed fifteen successive sessions on both limbs. The method used for assessment of the outcome volume of the lymphoedema was the manual tape measurement. The results were recorded every session and the mean value for each session of the sixty patients was compared with the mean value of the prior session. Paired samples T-test were used.

**Results:** All of the sixty patients demonstrated significant improvement and reduction in lymphoedema circumference size. Session comparisons of the right limb had a p-value <0.05 except between the sixth and seventh sessions where the p-value=0.283 and the fourteenth and fifteenth where the p-value=0.496. Also session comparisons of the left limb had a p-value <0.05 except between the sixth and seventh sessions where p-value=0.703.

**Conclusion:** Managing Lymphoedema represents a great challenge; however, our findings revealed that cautious progression with physiotherapeutic sessions are essential, ideally with close monitoring the effect of shock waves and lymph drainage with some equipment in lymphoedema management. Most of our patients lost their weight between 10 to 20 kg during their management buried in physical therapy in Altadawy physical therapy centre.