



CREATOR(S):

TITLE:

YEAR:

Original citation:

OpenAIR citation:

Copyright statement:

OpenAIR takedown statement:

Section 6 of the “Repository policy for OpenAIR @ RGU” (available from <http://www.rgu.ac.uk/staff-and-current-students/library/library-policies/repository-policies>) provides guidance on the criteria under which RGU will consider withdrawing material from OpenAIR. If you believe that this item is subject to any of these criteria, or for any other reason should not be held on OpenAIR, then please contact openair-help@rgu.ac.uk with the details of the item and the nature of your complaint.

This _____ is distributed under a CC _____ license.

To assess the efficacy and safety of manual lymphatic drainage in treating breast cancer related lymphoedema

This is a summary of a Cochrane review.

Relevance to nursing care

Despite advances in the clinical management of breast cancer, women treated with surgery and/or radiation may develop breast cancer related lymphoedema (BCRL), which is an abnormal accumulation of lymph fluid in the tissues and an enduring condition. Studies suggest around one in five women with breast cancer will develop BCRL on the affected side of the body following breast cancer. BCRL may be mild, moderate or severe and can affect the arm, hand, fingers, wrist, elbow, shoulder, neck, breast, chest or any combination of these areas. Symptoms include swelling, pain and discomfort, restrictions in physical functioning and psychological distress, all of which have an impact on quality of life.

Once BCRL has been diagnosed a fourfold treatment approach known as complex decongestive therapy (CDT) forms the mainstay of conservative treatment. This comprises manual lymphatic drainage (MLD), compression therapy, lymph-reducing exercises and skincare. MLD is a specialist intervention and may be given alone or as part of CDT. Nurses caring for women with breast cancer need to understand MLD as part of CDT and the importance of supporting compression therapy, lymph-reducing exercises and skincare as appropriate. They also need to understand the importance of assessment, referral for MLD and the impact on quality of life for BCRL in women.

Study characteristics

Participants were people diagnosed with BCRL in any body area (e.g. arm, hand, trunk). The intervention of interest was MLD. A manual therapy based on the anatomy of the lymph system, MLD is thought to reduce swelling by enhancing movement of lymph fluid, decreasing interstitial fluid and softening fibrosis. The MLD intervention was delivered by therapists trained in the anatomy and physiology of the lymphatic system. Duration and frequency of intervention was not specified.

The primary outcome of interest was volumetric changes in arm, hand, breast or trunk as measured by i) lymphoedema volume (excess fluid remaining after treatment); ii) volume reduction (excess fluid in millilitres before and after treatment as compared to unaffected site); and iii) per cent reduction (proportion of fluid reduced relative to baseline). The secondary outcome measures included functional measures (range of motion and strength), subjective sensations, quality of life and other psychosocial outcomes, cost of care and any other outcomes reported by the trial.

Six randomised controlled trials, totalling 208 participants, were included. The number of participants was small in each trial ranging from 24 to 45. Included studies did not assess MLD as a standalone therapy but rather MLD + standard physiotherapy versus standard physiotherapy (one study);

MLD + compression bandaging versus compression bandaging (two studies) or MLD + compression therapy versus non MLD treatment + compression therapy (three studies). Included studies varied on risk of bias, interventions used and outcomes measured.

Women treated with compression bandaging alone were shown to experience a reduction in swelling of around 30–37%. There was some evidence from this review that compression bandaging in combination with MLD may further reduce swelling by another 7–11%. The authors suggest MLD may offer benefit when added to compression bandaging and in particular for women with mild to moderate BCRL.

Implications for nursing care

The findings of this review suggest there's some evidence that MLD used in combination with compression bandaging may reduce swelling, which can be sustained over a longer period of up to one year if compression is maintained. It is important for nurses to

understand lymphoedema, given one in five women who receive treatment for breast cancer may experience this enduring condition. Most nurses will not provide MLD but can contribute to the conservative management of lymphoedema. They can do so by recognising the impact on quality of life BCRL has for women with this condition. Furthermore they have an important role to play in supporting women with BCRL to self-care in relation to good skincare, wearing compression garments, doing regular gentle exercises and ensuring appropriate referral to specialist support.

Implications for research

Further research is needed that can establish the relative contribution of MLD to CDT because no trial included all four components of CDT. There is also a need to establish the clinical relevance of the volumetric outcomes used and for these to be used beyond arm measurements. Future research should include quality of life and other psychosocial outcomes to ensure care is women/patient centred.

Summary authors

Catriona Kennedy (PhD), Professor of Nursing; and Siew Hwa Lee (PhD), Lecturer. School of Nursing and Midwifery, Robert Gordon University, Aberdeen, Scotland. Email: c.m.kennedy1@rgu.ac.uk. Members of the Cochrane Nursing Care Field

Reference

Ezzo J, Manheimer E, McNeely ML, Howell DM, Weiss R, Johansson KI, Bao T, Bily L, Tuppo CM, Williams AF, Karadibak D. Manual lymphatic drainage for lymphedema following breast cancer treatment. Cochrane Database of Systematic Reviews 2015, Issue 5. Art. No.: CD003475. DOI: 10.1002/14651858.CD003475.pub2.