

CAHE JC Critically Appraised Article Summary

Journal Club Details

Date of submission	November 2008
Journal Club location	Southern Cross Care
JC Discipline/s	Occupational Therapy
JC Facilitator	Jane Campbell

Clinical Scenario

Which of the different conservative therapies for secondary lymphedema has the best evidence for effectiveness?

Review Question/PICO/PACO

- P** People with lymphedema affecting one or more limbs
- I** Massage, laser, exercises, pressure garments, Tai-chi
- C** No intervention or any of the above interventions
- O** function, limb measurement

Article/Paper

Mosely AL, Carati CJ, Piller NB. A systematic review of common conservative therapies for arm lymphedema secondary to breast cancer treatment. *Annals of Oncology* 2007; 18:639-646.

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Article Methodology:	Systematic Review
Returned JC on:	5 November 2008
By CAHE staff member:	Lucylynn M. Lizarondo

Ques No.	Yes	Can't Tell	No	Comments
1	✓			<p>The review has a clearly focused question.</p> <p><i>Population:</i> Patients who had a formal diagnosis of secondary lymphedema due to breast cancer surgery with or without radiotherapy or chemotherapy</p> <p><i>Intervention:</i> Therapies commonly administered to secondary arm lymphedema patients (physiotherapy, lymphatic drainage, self-partner massage, pneumatic pumps, oral pharmaceuticals, laser, compression bandaging, compression garments, exercises, elevation)</p> <p><i>Outcomes:</i> The study did not explicitly indicate the specific outcomes of interest. It is apparent though that any outcome that reflects improvement of arm symptoms and quality of life issues were considered.</p>
2	✓			<p>The review included randomised controlled trials, parallel and cross-over designs, case control and cohort. Case control and cohort designs, whilst they belong to the lower levels of evidence, can still provide information about the efficacy of a particular intervention.</p> <p>Is it worth continuing? YES</p>
3	✓			<p>The bibliographic search has included a wide range of electronic databases and the reviewers did a follow-up on the reference lists. Health institution websites and online lymphatic societies were searched. Congress proceedings of the International Society of Lymphology and the Australian Lymphoedema Association were also scrutinised.</p>
4	✓			<p>The quality of papers was assessed based upon a tool developed by Mulrow and Oxman. Whilst the papers were appraised only by the primary author, the process was checked by the co-authors.</p>
5				<p>The results of the different studies were not pooled in meta-analysis due to the heterogeneity of data and interventions used.</p>
6				<p>The results were presented using narrative summaries and a graph showing the average percentage volume change at each trial of the different conservative therapies.</p> <p><u>Main result:</u> More intensive and health professional based therapies, such as physiotherapy, manual lymphatic drainage, pneumatic pump and laser therapy, resulted to greater volume reductions, whilst self-maintenance therapies such as compression garment, exercises and elevation yielded smaller reductions.</p>
7				<p>No statistical analysis was done on this review. Hence, it will be difficult to determine precision of the results.</p>
8		✓		<p>There seemed to be a good representation of patients who were diagnosed with secondary lymphedema secondary to breast cancer therapy. However, the extent to which the results can be applied to the local setting is a decision that is best made by those dealing with each individual setting.</p>

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Ques No.	Yes	Can't Tell	No	Comments
9	✓			The review has considered all the outcomes of studies investigating the effectiveness of the different types of interventions.
10		✓		Evidence suggests that there is a role for the different conservative therapies in the management of patients with secondary lymphedema. However, there is still need for large scale, high quality clinical trials in order to arrive at definitive conclusions regarding the different interventions.

For more information on the CAHE Journal Clubs contact:
CAHE JC Senior Researcher [Lucy Lizarondo](#) Ph 08 8302 2099 or
CAHE JC Administrator [Helen Walker](#) Ph 0411 677 457