

Compression in the Treatment of Lymphedema: Evidence for Effectiveness and Reduced Healthcare Expenditure

The Canadian Lymphedema Framework's **vision** is that comprehensive treatment for lymphedema and related disorders will be accessible to all persons across Canada.

Compression is an integral component of the standard of care for the treatment of lymphedema known as Complete Decongestive Therapy (CDT). The documents outlined below summarize several position papers, reviews, and consensus documents, all of which recognize the necessity of compression for patients with lymphedema. The last document, published by INESS (the body that does scientific reviews for the Quebec Ministry of Health) also recommended compression treatment and formed the basis for the Quebec reimbursement program.

1. International Lymphedema Framework (2012): *Compression Management, A Position Document on Compression Bandaging*³

The authors note the following regarding compression bandaging and garments:

- Lymphedema requires constant compression, if discontinued edema will recur rapidly.
- Compression removes edema by a reduction in capillary filtration, an increase in lymphatic drainage, a shift of fluid to non-compressed areas, and via a breakdown of fibrosclerotic tissue.
- Once swelling is maximally reduced, long term compression garments are required.

2. International Lymphedema Framework (2010): *Compression Hosiery (Garments) in Lymphedema*¹

The authors reviewed the published evidence for efficacy of compression garments and concluded the following:

- Studies with follow-up periods of six months to five years indicate that compression garments are effective in reducing and/or maintaining lymphedema of the arm and leg both in primary and secondary lymphedema.
- Compression hosiery (garments and arm sleeves) are an integral part of lymphedema management with strong evidence to support their use.
- Outcomes are less optimal in lymphedema management when compression therapy is not used.

3. International Lymphedema Framework (2006): *Best Practice for the Management of Lymphedema*

The authors indicate the following regarding compression bandaging and garments:

- Multi-layer lymphedema bandaging is a key element of intensive therapy regimens. For some patients it may also form part of their transition, long-term or palliative management.
- The main use of compression garments is in the long-term management of lymphedema, usually following a period of intensive therapy. Compression garments are also used for prophylaxis or as part of initial treatment.

4. National Lymphedema Network Position Statement on The Diagnosis and Treatment of Lymphedema⁴

- The gold standard for the treatment of lymphedema is known as Complete Decongestive Therapy.
- Compression Bandaging is always a requisite part of Complete Decongestive Therapy.
- Following achievement of maximal volume reduction with Complete Decongestive Therapy, patients should be fitted with a compression garment.

5. Cochrane Review of the Effectiveness of Various Lymphedema Therapies (2008)⁵

The review concluded that the use of compression bandaging and garments was more effective than garments alone. Additionally, they noted that when comparing no treatment to the use of compression garments alone, the garments were deemed beneficial.

6. Lymphedema Association of Quebec: *Treatment of Cancer-related Secondary Lymphedema*

- Wearing compression garments on a long-term basis appears essential for maintaining the volume losses achieved during the intensive phase. The approach must be customized to patients' needs.

References:

1. http://www.lympho.org/mod_turbolead/upload/file/Lympho/Template_for_Practice_-_Compression_hosiery.pdf
2. <http://www.cms.gov/medicare-coverage-database/details/medcac-meeting-details.aspx?MEDCACId=51&fromdb=true>
3. http://www.lympho.org/mod_turbolead/upload//file/Resources/Compression%20bandaging%20-%20final.pdf
4. <http://lymphnet.org/pdfDocs/nlntreatment.pdf>
5. <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0011841/CAId=50&ver=6&NcaName=Lymphedema+Pumps&NCID=190&ncdver=2&IsPopup=y&bc=AAAAAAAAEAAA&>
6. [http://www.cms.gov/medicare-coverage-database/\(S\(3iepps3hnwcrz5es0ppyu045\)\)/details/nca-decision-memo.aspx?N](http://www.cms.gov/medicare-coverage-database/(S(3iepps3hnwcrz5es0ppyu045))/details/nca-decision-memo.aspx?N)
7. <http://www.cms.gov/Regulations-and-Guidance/Guidance/FACA/downloads/id51a.pdf>
8. <http://www.cms.gov/Regulations-and-Guidance/Guidance/FACA/downloads/id51b.pdf>
9. <http://ptjournal.apta.org/content/92/1/152.full.pdf+html>
10. <http://jco.ascopubs.org/content/27/12/2007.full.pdf+html>
11. <http://www.oncologypt.org/publications/rehabilitation-oncology-journal/volumes/29/29-3-Rehabilitation-Oncology-Journal.pdf>
12. [http://www.ajicjournal.org/article/S0196-6553\(10\)00600-0/abstract](http://www.ajicjournal.org/article/S0196-6553(10)00600-0/abstract)