Best Practice for the Management of Lymphoedema–2nd Edition

Compression Therapy: A position document on compression bandaging

By Christine Moffatt and Deborah Glover

Managing lymphedema and chronic edema presents a challenge for the health care professional, the person living with the condition and often, their family. As yet, there is no cure, but recent research and growing awareness of the condition has however, offered well-founded interventions to both reduce swelling and ameliorate the associated side effects. The second edition of the 2006 document *Best Practice for the Management of Lymphoedema*,[1] entitled 'Best Practice for the Management of Lymphoedema - 2nd edition: Compression Therapy: A position document on compression bandaging', represents an international multidisciplinary initiative led by the International Lymphoedema Framework (ILF) in association with the Canadian Lymphedema Framework (CLF) and the American Lymphedema Framework Project (ALFP). It has contributions from expert practitioners who deal with lymphedema on a daily basis across the world, and the recommendations contained within it are based on physiological principles and the current evidence base. The document contains broad practice standards applicable to the international lymphedema community, which will be used for future review, consensus building, and translation.

partners agreed that while we are working towards a consensus on terminology in respect to lymphedema, for the purposes of the document, terms such as Decongestive Lymphatic Treatment (DLT) (also known as complete decongestive therapy (CDT) or complex decongestive physical therapy)

> The document contains broad practice standards applicable to the international lymphedema community.

Creating a second edition

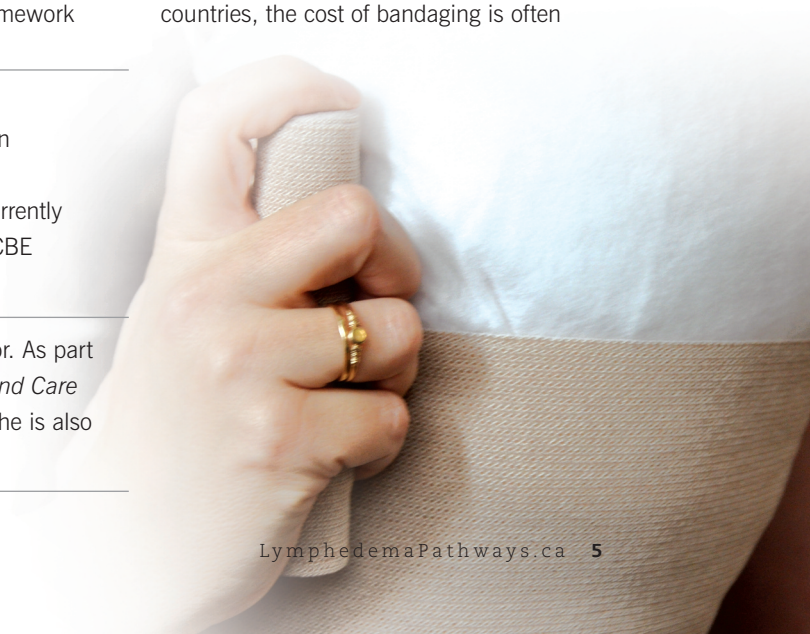
Of course, producing a document that can be used in any country or setting, be it resource rich or resource poor, has its problems! For example, terminology often varies between countries, issues of reimbursement are complex, and often, Western approaches to treatment and access to resources such as bandages, are neither possible nor desirable in some countries.

In order to address some of these issues, the ILF and its international framework would be used. What we can all say with some confidence, is that as recommended by the ALFP's recent systematic review, improved clinical trials and the ability to understand the relative contribution of the different aspects of treatment is required.

Lack of reimbursement for lymphedema care due to the dearth of research is a major international challenge and compromises access to appropriate compression bandaging in many parts of the world. In developing countries, the cost of bandaging is often

Christine Moffatt CBE FRCN PhD MA RGN DN is Professor of Clinical Nursing and runs a regional lymphedema clinical service in Nottingham University, Derby, England. She has been conducting research for 25 years in wound healing and lymphedema and is currently Chair of the International Lymphoedema Framework. Christine is an honoured CBE (Commander of the British Empire).

Deborah Glover RGN is an independent editorial and nurse advisor. As part of her portfolio, Deborah was the past editor of the *Journal of Wound Care* and is currently the Editor of the *Journal of Community Nursing*. She is also a Trustee/Director of the International Lymphoedema Framework.



prohibitive. In our document, an example of how this has been overcome in India is presented, despite poor access to health care, and the creative approaches to management that involve self care and involvement of family and the local community have much to teach the western world (Box 1)!

What's in it?

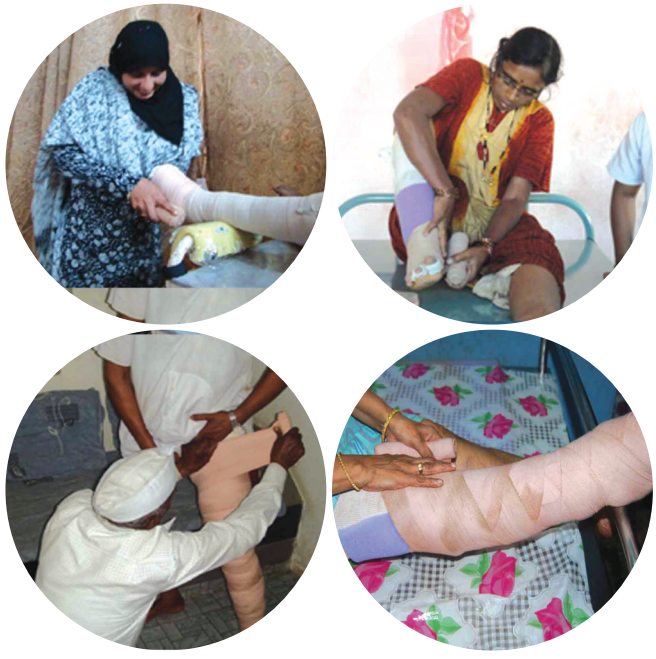
Those of you familiar with the first edition of the Best Practice Document,[1] will realize that this second edition only covers one aspect of DLT, namely compression bandaging. The editorial committee felt that a large, bulky document which tried to cover all aspects wouldn't do justice to the needs of patients and practitioners world-wide. Therefore, it was decided to build a compendium of individual, in-depth documents on topics which fall under the DLT 'umbrella'. In 2012, we are producing documents on compression, surgery and exercise. Each discreet section, building into a final 12-topic document, provides a model for best practice in the assessment, treatment and continuing management of lymphedema. Topics covered in the Compression document include:

- A contextual view of compression bandaging for lymphedema
  Christine Moffatt, UK
- An overview of the science behind compression bandaging for lymphedema and chronic edema
  Hugo Partsch, Austria and Christine Moffatt, UK
- Optimizing compression bandaging
  Jan Schuren, Netherlands
- Adapting compression bandaging for different groups
  Isabel Quéré, France and Margaret Sneddon, Glasgow
- Dermatological issues in lymphedema and chronic edema
  Mieke Flour, Belgium
- How to adapt compression bandaging for the palliative patient
  Anna Towers, Canada
- Compression therapy in Indian villages
  SR Narahari, India; Terence Ryan UK, K Vivekananda, and Pierre Brantus, France

continued on page 8

Box 1: Approaches to care in Indian villages

In India, lymphedema is endemic in villages and patients have to travel hours to reach a primary health centre. Providing compression is a skilled job and such expertise is not generally available, even in Indian cities. The Institute of Applied Dermatology (IAD) (www.iad.org.in/) has developed an integrative treatment combining the benefits of western biomedicine and the traditional Indian practice of Ayurveda and yoga to treat large numbers of lymphedema patients in Indian villages. Compression bandaging is part of IAD's integrative treatment of lymphedema.



Initially patients and their family members are taught about compression, particularly the figure of eight technique, using a dummy. Daily sessions take place from day seven of supervised care. All materials necessary for compression and the role of these materials are discussed. An outline of how to manage constriction, rolling and numbering of bandages (to identify wear-time/durability) is included. Videos of how to undertake compression are shown and patients and their home care givers participate in role play, using each other's normal limbs to practice on.

FIGURE 1

From day nine of supervised care, compression is practiced on the patient's affected limb (Figure 1). A practical demonstration is given, including toe compression, cloth wrapping, CCF sheet preparation and placing, preparation of de-kinking materials. In the theory class, disinfection methods and durability of bandages and other accessory materials are discussed. The issues arising out of improper bandaging techniques are repeatedly emphasized.

New insights into compression bandaging for lymphedema

This document contains new insights into the way in which bandaging acts in the control of edema. New research is moving towards a clearer understanding of an "ideal" or an "intelligent" bandage or compression system and will allow new technologies to be developed in response to this insight. The document challenges some of the traditional dogmas in compression bandaging and provides clear recommendations on how compression can be effectively used for the complex patient groups seen in clinical practice who require different pressure profiles. The lymphedema population is becoming more complex due to factors such as increased age, concurrent health problems, morbid obesity and decreased mobility. Professionals must be equipped to use compression bandaging in adaptive and effective ways to ensure the optimum outcome is achieved.

New research is moving towards a clearer understanding of an "ideal" or an "intelligent" bandage or compression system and will allow new technologies to be developed in response to this insight.

The document will present a set of summary statements which relate to best practice for compression drawn from each chapter. An example of those regarding compression is shown in box 2 below.

Summary

Management of complex lymphedema requires highly skilled, specialist practitioners to work in partnership with the patient and family to facilitate timely and appropriate management of both the lymphedema and associated side-effects. Research in the United Kingdom and Canada show that many lymphedema services are treating more complex patients with multiple co-morbidities and continue to be referred patients who have not been diagnosed or offered treatment.[2]

It is also universally acknowledged that traditional bandaging used in DLT requires considerable commitment from sufferers to attend for daily treatments, and that the treatment itself may restrict their work and social activities. This document presents recent research which suggests a new compression method enabled only twice-weekly treatment, clearly a bonus for all concerned and information that needs to be out there!

Presenting and recommending such innovations is at the philosophy of the new document. We want as far as possible, all practitioners and people with lymphedema, to be able to use the tools and resources they have in the most appropriate and effective way, taking into consideration personal, local and national issues.

We will be launching the Compression and Surgery documents at the ILF conference in Montpellier (France) in June. The document will also be available on the ILF website from July 2012. LP

Box 2: Summary statements—compression

- Chronic edema and lymphedema needs continuous compression; if compression is discontinued, edema will recur. This is also true after liposuction and most other surgical procedures.
- Self-management is a goal based on important psychological and economic advantages; thus, patient education to underline the importance of compression and movement (structured exercises) is essential.
- The initial therapy phase should use compression adjusted to the underlying pathology, limb size and to the local background concerning practical feasibility.
- Inelastic bandages (applied by trained people) should not impede joint movement; re-bandaging is determined by the amount of edema reduction (pressure fall) and the local facilities.
- When edema reduction is optimized, compression needs to be continued using made-to-measure (preferably inelastic, flat-knitted) compression sleeves.
- Compression should always be accompanied by the other components of DLT, especially exercise, to enhance functionality and the decongestive effects; skin care is required to prevent (recurrent) infections which will worsen lymphatic drainage.

References

1. Lymphoedema Framework. *Best Practice for the Management of Lymphoedema*. International Consensus. London: MEP Ltd; 2006.
2. Morgan PA, Murray S, Moffatt CJ, et al.The challenges of managing complex lymphoedema/chronic oedema in the UK and Canada. *Int Wound J*. 2012; 9:54–69.