

CATEGORY: COMPRESSION

FARROWWRAP®

MAKING THE CASE

INDICATIONS

FarrowWraps are easy-to-apply compression garments available in a range of LITE, STRONG and CLASSIC fabrics for patients with mild, moderate and severe lower limb lymphoedema.

Secondary indications include:

- Inability to tolerate compression bandaging or hosiery
- Abnormal/distorted limb shapes
- Inability to apply compression hosiery (e.g. due to weak hand strength, back problems or obesity)
- Fluctuations in limb swelling
- Stubborn or rebound oedema
- Fragile skin at risk of breakdown.

PRECAUTIONS AND CONTRAINDICATIONS

A vascular assessment should be undertaken prior to application to exclude moderate to severe arterial insufficiency, uncontrolled heart failure and severe peripheral neuropathy. FarrowWrap may be used with caution in patients with skin infection (but not advancing cellulitis), mild to moderate arterial disease and history of thrombosis. It should not be worn without appropriate foot compression.

PRODUCT DESIGN

FarrowWraps comprise a protective liner and multiple, overlapping bands of short-stretch inelastic material interconnected by a spine. They are designed to be worn with a liner; padding can be added for patients requiring extra skin protection. Both layers are breathable, washable and reusable, with a guarantee of 6 months. Where tolerated by the patient, the optimum level of pressure should be applied in order to achieve and maintain volume reduction:

- CLASSIC: 30-40mmHg (moderate to strong compression)
- STRONG: 30-40mmHg (moderate to strong compression)
- LITE: 20-30mmHg (mild to moderate compression)

In general, the stiffer the fabric, the more effective it is at reducing oedema. The CLASSIC system is robust and rigid, while the LITE system is thinner, cooler to wear and may be more suitable for elderly or palliative care patients. The STRONG system is suitable for those patients who require stronger compression but cannot tolerate or do not need the rigidity of the CLASSIC system.

Figure 1: Application of FarrowWrap



HOW DOES FARROWWRAP WORK?

The short-stretch compression bands are secured using Velcro, with the patient applying the wrap at near-end stretch to achieve graduated compression (Fig 1).

FarrowWrap uses short-stretch technology to create a semi-rigid compression system. This provides the necessary resistance during exercise to create pressure fluctuations in the lower limb, with high working pressures and low resting pressures.

These fluctuations can enhance calf muscle pump activity and improve lymphatic and venous return, reduce swelling and prevent re-accumulation of lymphoedematous fluid in the lower limb (Wigg, 2012). It can be worn during the day and/or at night.

SAFETY AND TOLERABILITY

FarrowWraps are well tolerated by patients who can easily modify the amount of compression applied, tightening the Velcro straps throughout the day as required as part of their self-management. There have been no reported cases of allergy to the materials used.

CLINICAL EVIDENCE FOR USE

A number of small-scale studies and case reports have shown that FarrowWrap:

- Achieves therapeutic levels of compression compared to conventional short-stretch bandages (Davey and Mayrovitz, 2006)
- Reduces limb swelling and maintains volume reduction, with potential to reduce need for repeated courses of decongestive lymphatic therapy (Lawrance, 2008; Wigg, 2012)
- Is comfortable and easy to apply (Lawrance, 2008; Wigg, 2012)
- Minimises garment slippage and conforms to limb shape (Wigg, 2012)
- Provides an alternative to compression hosiery in patients who have a history of non-concordance with compression (Smith et al, 2005).

COST

FarrowWrap compression garments are available on Drug Tariff. The costs are similar whether ordering STRONG, CLASSIC or LITE systems and for all limb sizes and lengths. The footpiece, legpiece and thighpiece together cost approximately £292.50-£295 (excluding VAT); items can be purchased separately.

References

- Davey S, Mayrovitz HN (2006). NLN poster presentation. <http://bit.ly/1BlhSKz>
- Lawrance S (2008). *Ost Wound Manage* 54(1): 20-32. <http://bit.ly/1DppWdQ>
- International Lymphoedema Framework (ILF) (2012). <http://bit.ly/19X7Rkc>
- Partsch H (2007). *J Lymphoedema* 2(2): 55-61
- Smith L, et al (2005). SAWC poster presentation. <http://bit.ly/1zNquD7>
- Wigg J (2012). *Chronic Oedema* 4:S22-29. <http://bit.ly/1zNpTRV>
- For further information on FarrowWrap: www.hadhealth.com/farrowwrap.php

Explanation of how to use this guide: This document can be used to make the case for implementing effective prevention and management measures and may be supported by data from your own care setting. As well as economic impact, it is important to know the impact of interventions on patient quality of life and outcomes.

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COMPRESSION AND LYMPHOEDEMA

Lymphoedema is a chronic disease needing life-long treatment comprising compression, good skin care, exercise and rehabilitation. Patients with lymphoedema experience greater levels of functional impairment, poorer psychological adjustment, anxiety and depression than the general population (ILF, 2012).

Management focuses on limiting further deterioration of swelling, enhancing limb function and gaining long-term control of the condition. Compression plays a central role in achieving these goals. There is increasing support for stiffer compression systems (e.g. short-stretch/inelastic) that provide high working pressures and low resting pressures (Partsch, 2007). However, concordance with compression is difficult to achieve in all patients using short-stretch hosiery ("it is just too tight"), and often means that a therapeutic level of compression is not consistently applied (Lawrance, 2008).

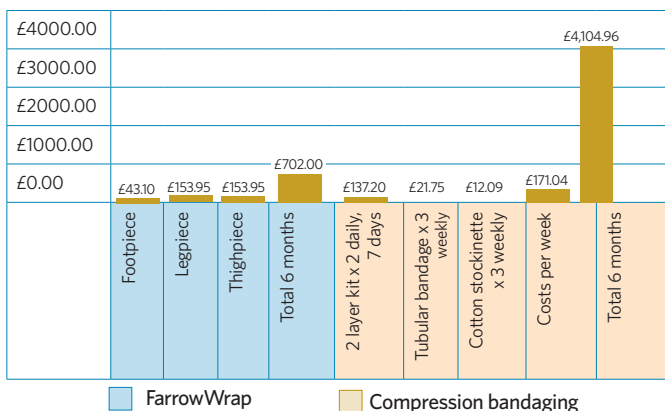
Encouraging self-management using an easy-to-apply system may help to achieve better control of stubborn oedema and provide clinical and economic benefits.

ECONOMIC BENEFITS OF USING FARROWWRAP

The following cost comparison demonstrates that the FarrowWrap system can provide a cost-effective option for lymphoedema management. A saving of £3402.96 was achieved using FarrowWrap compared to 2-layer compression bandaging (Fig 2).

At the start of the comparison, the patient was receiving twice-daily visits from the district nurses to change bandages and dressings. Using FarrowWrap, visits were reduced to once daily to provide skin care and reapply the compression wrap, saving 30 minutes per visit. The reduction in visits and nurse prescribing saved an additional £3340.09 in nursing time over 6 months (cost comparison based on data collected by Anne Tweedie, Tollcross Health Centre, Edinburgh).

Figure 2: Comparing the cost of FarrowWrap with 2-layer compression bandaging



*Costs are inclusive of VAT, correct as of March 2014

Q WHAT CLINICAL AND ECONOMIC BENEFITS HAVE YOU SEEN IN YOUR PRACTICE?

In your experience, has FarrowWrap had a positive impact?

- Q: Are patients who have previously had problems wearing compression hosiery able to tolerate FarrowWrap?
- Q: Has improved concordance led to better control of oedema?
- Q: Have patients had fewer admissions for cellulitis, reducing costs?

IMPACT OF USING FARROWWRAP ON PATIENT

The advantage of using the FarrowWrap system over conventional short-stretch, inelastic bandaging is the ability for the patient to self-apply (Lawrance, 2008). Patients can also use the straps to modify the amount of compression, which can better meet their fluctuating needs (Lawrance, 2008).

Patients have reported satisfaction with ease of use of the product (Smith et al, 2005), including the amount of time it takes to apply and remove compared with standard compression bandages (Davey and Mayrovitz, 2006). In particular, patients who found it difficult to use elastic compression hosiery reported improved satisfaction with the system, finding it comfortable to wear and effective in reducing and maintaining their limb swelling.

By providing patients with the necessary skills to manage their condition, nurses can supervise patient self-management, an important step in their rehabilitation. When using the system, patients found that it gave them better control over their situation, improving their quality of life and level of independence (Lawrance, 2008). By reducing clinical supervision, there may also be a potential to reduce the workload for lymphoedema specialists in the clinic and district nurses in the community, saving valuable resources and allowing nurses to work smarter and to meet budgetary targets (Wigg, 2012).

Q DO YOU HAVE ANY CASE STUDIES OF YOUR OWN TO DEMONSTRATE IMPACT OF USING FARROWWRAP?

CASE STUDY

Background

- Patient with secondary lymphoedema due to paraplegia following a road accident aged 16
- Evidence of worsening lymphoedema and 18-year history of ulceration and recurrent infections
- Diagnosed with severe arterial insufficiency September 2012 (compression therapy contraindicated)
- Following a left femoral popliteal bypass in April 2013, he was referred to the lymphoedema service in December 2013
- Patient responded well to compression bandaging
- Unable to wear hosiery for long-term management due to foot size (Fig 3) and skin being very fragile and at high risk of breakdown
- Patient introduced to FarrowWrap Lite due to past arterial surgery; ABPI slightly above 0.8 threshold.

Outcome

- Able to self-manage with the support of his carer, who was shown how to apply the footpiece and legpiece
- Long-standing ulcer went on to heal in 3 weeks
- Limb volume remains stable
- FarrowWrap now worn for 12 months with no repeated occurrences of cellulitis or ulceration
- Has had a huge impact on the patient's quality of life.



Figure 3: Patient unable to wear compression hosiery due to foot swelling and skin condition

Acknowledgement: Robin Cooper, Lymphoedema Nurse Specialist, Salisbury NHS Foundation