

CATEGORY: COMPRESSION HOSIERY KITS

ADOPTING A NEW MODEL FOR LEG ULCER CARE

MAKING THE CASE

COMPRESSION THERAPY FOR VENOUS DISEASE

Venous leg ulcers (VLUs) affect around 1 in 500 people in the UK, cost £168-198 million per year and recur in up to 70% of patients (Posnett and Franks, 2007). Although compression therapy is considered the gold standard treatment for healing VLUs (O'Meara et al, 2012), it is often underused (Harding et al, 2015). This is due in part to a lack of professional knowledge and practical skills associated with leg ulcer management (Chamanga, 2014). In addition, many patients find traditional compression systems uncomfortable and bulky, creating problems with footwear and reduced mobility. This can have a negative effect on healing rates (O'Meara et al, 2012).

The NHS Five Year Forward View (2014) calls for new models of care with prevention a key focus. Providing alternative appropriate treatment options that incorporate patient preferences and facilitate self-care in VLU management can increase healing rates and help to prevent recurrence, freeing up clinician time to care (Tickle, 2014). To implement a change in practice requires knowledge of available compression therapy systems and awareness of the evidence for their use in patients with leg ulcers.

ARE ALL COMPRESSION THERAPY SYSTEMS THE SAME?

Four-layer compression bandaging has traditionally been considered first-line in the treatment of VLUs. Two-layer systems (including hosiery kits) provide comparable levels of sustained therapeutic compression, but offer the added advantage of being less bulky and easier to apply (Williams, 2002). However, evidence is needed to evaluate the performance of different therapy systems.

In the VenUS IV (Venous Leg Ulcer Study IV) trial, 453 patients with a VLU were randomly allocated a 2-layer compression hosiery kit (n=230) or a 4-layer compression bandage (n=223) (Ashby et al, 2014). Trial data found no evidence of a difference in VLU healing: 99 days (70.9% healed) in the hosiery kit group versus 98 days (70.4% healed) in the 4-layer bandage group, indicating that hosiery kits and 4-layer bandaging may be equally effective in the treatment of VLUs (Ashby et al, 2014).

Hosiery kits were also associated with a substantial reduction in recurrence and lower costs over a 12-month period (Ashby et al, 2014). The authors concluded that 'increased use of hosiery kits is likely to result in substantial savings for the NHS and improved quality of life for people with venous ulcers' (Ashby et al, 2014).

Activa™ Leg Ulcer Hosiery Kits were among the four hosiery brands used in the VenUS IV trial.

Can 2-layer hosiery kits overcome common compression challenges?

- ✓ Able to achieve consistent therapeutic levels of compression
- ✓ Easy to apply
- ✓ Require minimal training time
- ✓ Reduced risk of recurrence
- ✓ Encourage patient independence
- ✓ Supported by evidence

ACTIVA™ LEG ULCER/ACTILYMPH™ HOSIERY KITS

Activa™ Leg Ulcer Hosiery Kits are designed to be an alternative to traditional compression bandages for the treatment of uncomplicated VLUs (e.g. low to moderately exuding).

There are two types of Activa hosiery kit available:

- Activa™ Leg Ulcer Hosiery Kit
- ActiLymph™ Hosiery Kit.

The Activa Leg Ulcer Hosiery Kit is designed for patients with a VLU who have no evidence of oedema. If the patient has any lower limb swelling, the ActiLymph Hosiery Kit would be more beneficial — this is due to the increased stiffness of the fabric used, which is more effective at controlling oedema. It is important that clinicians consider this factor when selecting compression as it can mean the difference between effective, concordant treatment and a poor response. Before the application of compression therapy, all patients should have a full holistic assessment, incorporating a Doppler measurement (ABPI) to rule out any evidence of arterial disease and to ensure that the correct compression therapy system is implemented successfully.

1 The Activa Leg Ulcer Hosiery Kit — comprises a closed-toe silky 10mmHg liner with a below-knee, open-toe British Standard Class 3 graduated compression stocking, which slides over the top. Available in black and sand



2 The ActiLymph Hosiery Kit — contains the same silky liner combined with a European Class 2 graduated compression stocking (with increased stiffness to manage oedema). Available in black and sand

Stocking and liner are latex-free and, if two kits are prescribed, are guaranteed for 6 months (with up to 100 washes of each compression stocking).

COST (DRUG TARIFF, JULY 2015)

Brand	Sizes available	Cost per pack	Cost over 12 weeks
Activa Leg Ulcer Hosiery Kit (contains 1 stocking and 2 liners)	Small, Medium, Large, Extra Large, Extra Large	£22.56	£1.88 per week
ActiLymph Hosiery Kit (contains 1 stocking and 2 liners)	Medium, Large, Extra Large, Extra Extra Large	£29.75	£2.48 per week

Additional Activa liners are available with 3 in each pack (black, sand or white)

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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DEVELOPING A NEW MODEL OF CARE

The findings of the VenUS IV trial confirm that hosiery kits can now be seen as a viable first-line option for the treatment of VLU in suitable patients (Figure 1).

	2-layer hosiery	4-layer bandage
Median time to healing	99 days	98 days
Proportion VLU healed	70.9%	70.4%
Mean annual cost	£1,493.90	£1,795.30
Ulcer recurrence	14%	23%

Figure 1: Main findings from VenUS IV trial (Ashby et al, 2014).

A period of compression bandaging may be required initially if there is evidence of reducible oedema or where exudate levels are high. Once the oedema is reduced and exudate levels are controlled, patients can be treated with a hosiery kit. Where hosiery kits are used in the treatment phase, patients have demonstrated good concordance, with the potential to achieve better outcomes in the maintenance phase (Ashby et al, 2014).

After healing, patients need to continue to wear compression therapy to prevent ulcer recurrence. However, patient tolerance of compression is poor (Nelson and Bell-Sayer, 2000). A 2-layer hosiery kit may address factors that negatively affect patient concordance with treatment, including ease of application and reduced bulk (Wounds UK, 2014).

ECONOMIC BENEFITS OF USING 2-LAYER HOSIERY KITS

The cost of compression therapy is an important factor to consider. The VenUS IV trial reported that the mean annual cost of the 2-layer hosiery kit per patient was £302.40 less than that for the 4-layer compression bandage group. This was mainly because the patients using the 2-layer hosiery kit required fewer nursing consultations and had higher average quality-adjusted life year scores (Ashby et al, 2014). Of the four hosiery kits used within the trial, the Activa Leg Ulcer Hosiery Kit is the least expensive (see Costs overleaf).

Patients using hosiery kits also demonstrated lower recurrence rates than those in the 4-layer bandage group, offering further potential to reduce long-term costs (Ashby et al, 2014).

Q WHAT COST-SAVINGS COULD YOU MAKE IN YOUR PRACTICE USING 2-LAYER HOSIERY KITS?

CLINICAL BENEFITS OF USING 2-LAYER HOSIERY KITS

The use of traditional 4-layer compression bandaging requires intensive education and training for healthcare staff to encourage consistency, with regular assessment of competency levels, which is often not possible due to time constraints (Chamanga, 2014).

Two-layer hosiery kits can help to reduce reliance on bandaging skill of the practitioner. The smooth inner liner makes it easier to apply the stiffer outer layer and achieve consistent therapeutic compression levels. Less-skilled individuals — including patients — can apply the kits, lowering the costs of training and releasing nursing time to care.

PATIENT BENEFITS OF USING 2-LAYER HOSIERY KITS

Leg ulcer hosiery kits can provide numerous benefits to patients. They are often more acceptable to patients than bandages, as they look more attractive and allow them to wear normal clothes and shoes. This is important for body-image and can also allow the patient to exercise — known to be important for effective compression (Harding et al, 2015). The kits can be removed and reapplied to enable personal care activities (e.g. showering), increasing patient independence (Wounds UK, 2014). This can also reduce reliance on frequent (and often inconvenient) visits to leg ulcer clinics to have bandages reapplied and can better prepare patients for the maintenance phase, thereby reducing recurrence rates.

Involving patients in decisions about their treatment can help to bridge the gap between clinical and patient priorities (Wounds UK, 2015). Those patients who struggle to adhere to a compression bandage system may accept a hosiery kit that allows them to self-manage. Patients should be supported by written information about their condition and why they need to wear compression. To maximise the life, clinical and cost-effectiveness of the kit, patients should receive education on how to wash and care for their hosiery (Wounds UK, 2015).

Q FROM YOUR OWN CASELOAD, WHAT CLINICAL AND PATIENT BENEFITS CAN YOU DEMONSTRATE USING ACTILYMPH/ACTIVA LEG ULCER HOSIERY KITS?

If you were to explain to a colleague why you have chosen ActiLymph/Activa Leg Ulcer Hosiery Kits, what would you give as the main benefits? For example:

- ✓ Easier to apply than traditional compression bandaging
- ✓ Deliver a standardised level of therapeutic compression
- ✓ Allow patients to wear normal footwear, increasing mobility
- ✓ Look more attractive than bandaging
- ✓ Can be worn for up to 7 days or can be self-applied
- ✓ Improve concordance, with potential to increase healing rates and reduce ulcer recurrence
- ✓ Allow resources to be used efficiently while not compromising patient outcomes
- ✓ Reusable stockings rather than disposable bandages
- ✓ Only one charge payable by patients who pay for their prescription

References

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