TOP TIPS FOR PREVENTION OF VENOUS LEG ULCER REOCCURRENCE

Despite positive outcomes from the use of compression bandaging to heal venous leg ulcers, often there is a reoccurrence of tissue damage. This can be due to various factors, such as unrecognised allergic contact dermatitis, weight gain and noncompliance regarding hosiery use. This article outlines 10 top tips designed to aid the clinician in preventing the reoccurrence of venous leg ulceration.

Venous leg ulcers are often linked to the older population, but studies have suggested that up to 46% of people with leg ulcers developed their ulcer before the age of 50 (Mackenzie et al, 2003). Ulcers can be linked to chronic venous disease (CVD), which is the most common cause of leg ulcer development (Bianchi et al, 2013). CVD develops when blood pressure increases in the veins (venous hypertension), impairing the return of blood to the heart. Some early signs of venous hypertension are spider or thread veins, varicose veins and oedema. Unless this is recognised, and the sustained increase in venous pressure addressed by taking preventative action, there is a greater risk of fluid leakage, which can eventually lead to leg ulceration. Once a limb is ulcerated, the best course of action is to use compression bandaging to manage the affected area (Eagle, 2009). Once the ulcer is fully healed, compression hosiery is required to prevent ulcer reoccurrence (Vandongen and Stacey, 2000). This article offers top tips covering the prevention of venous leg ulcer reoccurrence.

1 SHARED CARE AND HONESTY
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2 CORRECT MEASUREMENT AND HOISERY CHOICE
Compression hosiery is recognised as the best method for preventing the reoccurrence of venous leg ulcers (Eagle, 2009). To ensure the correct choice of compression hosiery, both physical and psychological factors must be considered (Newton, 2015). Hosiery is available as a ready-to-wear, off-the-shelf garment, or can be made-
to-measure. It is constructed either as a circular or flat knit. The circular option is used mainly in the prevention and management of uncomplicated venous hypertension has been reported anecdotally as being the easier option of the two to apply. Flat knit hosiery controls and reduces oedema more robustly due to its stiffness, however, anecdotally, it has been reported as being harder to don and doff by patients.

It is important to recognise when made-to-measure is more appropriate for a patient that had more complex hosiery needs due to factors such as limb shape and type of oedema. Equally, the hosiery must be accurately measured to ensure the garment stays in place and does not ruck or roll down, causing a tourniquet effect or pressure damage. The practitioner should have a sound understanding of appropriate measuring tools, guidelines, and manufacturer-specific requirements available to be used in the correct choice for the patient. The correct choice equals correct fit which, in turn, aids concordance.

3 COMPRESSION HOISERY; PHYSICAL FACTORS

Once the choice of hosiery has been agreed with the patient and procured, it is important that the first application is undertaken by the patient with the practitioner present. If the patient cannot independently apply the hosiery, due to excess weight, an underlying medical condition, increased age or reduced strength in the upper limbs, this will affect their concordance. If a carer, spouse or partner is involved, they can be shown how to apply and remove the hosiery, if the patient agrees. There are care agencies that recognise this need and offer this service, however, this comes with a financial cost. To aid independence and concordance with hosiery use there are a variety of applicators available, either via the NHS or privately obtained. However, it is beneficial for the patient to trial the equipment to ensure it is appropriate for their needs before making a final choice.

4 COMPRESSION HOISERY; LIFESTYLE FACTORS

The lifestyle of the patient should be considered when choosing a compression garment. As stated earlier, venous leg ulceration is not a disease of the older population, with 46% of people with leg ulcers developing their ulcer before the age of 50 (Mackenzie et al, 2003). It is important to involve the patient in deciding on the type of garment to be used, since this will help to ensure concordance in the wearing of the hosiery. It is futile supplying a garment that may satisfy all the medical requirements without addressing the patient’s perspective. It is also important to consider how hosiery use may affect their lifestyle. For example, the garment may not be discreet enough for day-to-day use when combined with a patient’s work uniform, and a garment that is sheer or a different colour would be preferred.

5 COMPRESSION HOISERY INFORMATION AND EDUCATION

From the initial assessment to the supply and wearing of compression hosiery there must be a level of information giving. This information should include verbal advice to the patient about what is a good fitted garment for them and also visual incorporating a demonstration using their limb. An information leaflet to include donning of the garment, avoiding rolling the hosiery down, how to wash and dry the hosiery among other factors, is an invaluable tool. If the patient or carer has a leaflet to use as a reference guide to using compression hosiery, they will be better at recognising the need for the prescription of new hosiery, or changes that may indicate they require review. In the author’s view, having a leaflet to refer to empowers them to take responsibility for their healed limb and, thus, improves concordance.

6 REGULAR RENEWAL OF COMPRESSION HOISERY

It is the responsibility of the health professional to ensure that the patient understands the importance of regularly renewing their garment. An old stocking will have been worn and stretched during use, resulting in a loss of elasticity. These garments will not support the oedema or underlying venous hypertension and tissue damage can reoccur. Firstly, the patient’s general practitioner must be advised of the full details of the hosiery being used. The patient should then be advised to seek a prescription for the same item after a period of time. In most cases, it is recommended that a patient be remeasured, and the compression hosiery replaced, every 3-6 months (NICE, 2012).

As this can vary with different hosiery types, it is advisable for the practitioner to have brand-specific information to hand.

7 REGULAR INSPECTION OF COMPRESSION HOISERY

The patient or carer should be advised of the importance of checking that the garment remains in good condition. Advice should be given as to maximising the working life and effectiveness of the hosiery, to ensure it remains functional until their next prescription (Wounds UK, 2015).

8 REGULAR REVIEW; PHYSICAL FACTORS

The patient should be advised to regularly inspect their general skin condition and look out for changes in skin colour, bruising, or any possible indicators they may recognise as pertinent to their skin and early tissue damage. Any discomfort being experienced in the limbs while wearing the garment should be reported to the GP or practice nurse. It would be hoped that this was due to a garment fitting issue as opposed to any changes to their underlying physiology.

Information should be given advising patient’s of the main indicators of arterial insufficiency and how to seek assistance from a healthcare professional to seek a repeat ankle...
brachial pressure index (ABPI). This is important to ensure that the changes the patient may have observed are not linked to changes to their arterial supply, which will affect their hosiery use. It is also good practice to repeat the ABPI on a regular basis for those wearing compression garments. The Royal College of Nursing (RCN, 2006) guidelines suggest three-month reviews to include a repeat ABPI.

9 REGULAR REVIEW; LIFESTYLE FACTORS
It is also important to ensure contact with the patient to establish any other factors that may affect the wearing of the hosiery (such as weight loss or new employment) and to ensure they continue to be worn appropriately. If previously a patient was employed in a role that predominately required trousers but has now commenced a role where this is no longer required, the aesthetics of the garment will now have a greater impact on the use. Weight loss will reduce the limb and an older garment will not fit as it should, this too can affect the wearing of the hosiery. Thus, regular review appointments are vital and so too is the offer of social events, such as a hosiery review gathering where the meeting is less formal while remaining beneficial to the patient.

10 DERMATOLOGICAL FACTORS
When assessing the patient initially, a holistic assessment should always be undertaken to include not only the venous leg ulcer but so too all factors that will impact on treatment and hosiery choice. One factor that is often forgotten that is of vital importance is the general condition of the tissue on the limb and the need to consider issues such as hydration, Ppmentation/lipodermatosclerosis, any itching, scarring etc (Best Practice Statement, 2015).

A patient with venous eczema or allergic contact dermatitis while in compression bandaging will rarely have skin irritation, providing the compression bandaging is applied correctly. Once healed to transition into compression hosiery, consideration must be given to the brand and textile type of the same. If discomfort occurs with the wearing of compression hosiery and there is irritation, it is unlikely the patient will continue to use the garment. Thought to the elastic versus cotton content of the hosiery must be given and a liner may also be required if the tissue on the limb is hypoallergic. Skin care is of vital importance and consideration must be given to how the limb is washed and which emollient or soap substitute is used. Without these considerations the general skin condition of the limb may quickly deteriorate with the patient feeling irritation and discomfort. This, in turn, will affect the wearing of the hosiery and concordance will be compromised.

Conclusion
There are many factors that can impact on the reoccurrence of venous leg ulcers. It is how the practitioner approaches these that can make all the difference to the patient. From the onset, an honest and therapeutic relationship must be created as the one-size-fits-all approach will doom any positive outcome. This is also true in the choice of hosiery for the patient and it must be remembered that one brand or type of hosiery is not always suitable for all. It is important to equip the patient with as much or as little information as he or she needs to ensure they understand how to prevent venous leg ulcer reoccurrence.

References