

A Guide for Matching Compression Therapy to Lower Limb Conditions

Winnie Furlong - Clinical lead leg ulcer service & Karen Staines - Honorary tissue viability/chronic oedema CNS

The Princess Alexandra Hospital 
NHS Trust

Introduction

The management of chronic lower limb conditions can be challenging for generalist clinicians.

Locally it was identified that:

- clinicians were challenged with compression selection to best manage venous leg ulceration (VLU) and lower limb disease progression.
- there was an increase in patients presenting with chronic oedema (with or without VLU).
- the presence of oedema in the foot was identified as a particular challenge that can be further exacerbated due to inappropriate selection and application of compression.

Method


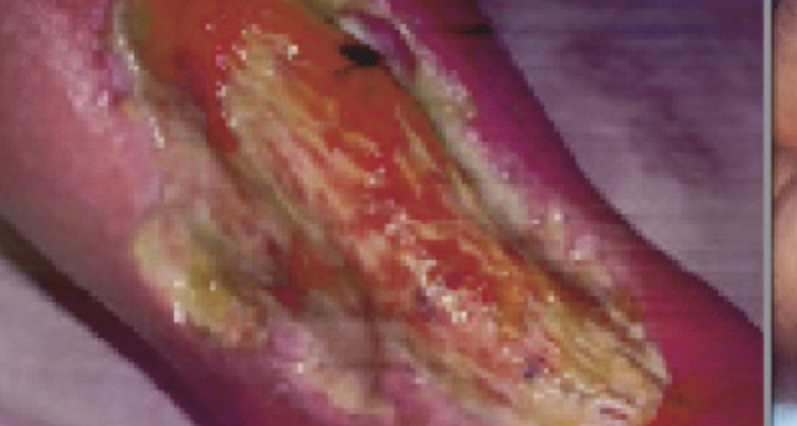

A review of management across the organisation identified the following issues:

- Increase in patients presenting with lymphoedema and lymphovenous disease
- Patients presenting with venous leg ulceration and oedema concentrated to the dorsum of the foot
- A lack of consistency in terms of assessment, product selection and treatment for those with VLU and foot oedema
- In 2013/14 HES data indicated that there were 597 local admissions for treatment of cellulitis

Flow chart guidance is the first step in changing practice to manage patients with chronic lower limb conditions more effectively.

Results

Early indications show staff are more confident in their selection of compression therapy and the need to refer to the vascular team for differential diagnosis. Episodes per patient for Cellulitis and lower limb ulcer sit at 73% and 72% of the National average respectively, versus 94% and 96% the previous year.

Venous Ulcer	Arterial or Mixed Aetiology Ulcer	Lymphovenous/ Lymphoedema
		
ABPI 0.8 – 1.3 <ul style="list-style-type: none"> • Presenting with open ulcer • Presenting with signs of venous disease • Oedema to the lower leg excluding the foot/toes 	ABPI < 0.8 <ul style="list-style-type: none"> • Refer to Vascular for further investigation 	ABPI 0.8 – 1.3 <ul style="list-style-type: none"> • With or without a leg ulcer/lymphorrhoea • With or without signs of venous disease • Oedema to leg may extend from the thigh to toes
Compression Therapies		
<ul style="list-style-type: none"> • K Two • K-Four • Actico® 10cm • Leg Ulcer Hosiery Kit - 40mmHg (Activa®/Mediven®) <p><i>(If no improvement on K Two or K-Four within 6 weeks then consider change to Actico®)</i></p>	<p>Mixed ABPI 0.7-0.8 With no diabetes or clinical indication of intermittent claudication or rest pain (pain in foot) - may consider reduced compression (17mmHg)</p> <p>ABPI 0.6 or less: no compression - refer to Vascular team for further investigations</p>	<ul style="list-style-type: none"> • Actifast®/Cellona® to protect, using pleating or pillows to shape leg to inverted cone • Actico® 8cm/10cm/12cm • Commencing with 8cm at foot • Toe bandages may be required if oedema to toes (Mollelast® 4cm) • Made to Measure Hosiery - Refer to patient appliances
<p>All patients should be referred to the Vascular team or CNS for leg ulcers, for further investigations and conclusive diagnosis.</p>		
<p>NOTES Avoid adhesive dressings or tape on skin Avoid use of foam dressings under compression therapy</p>		

Hosiery kits can be used as a first-line approach in the absence of high levels of limb distortion or wound exudate

For those with VLU and no foot oedema, 2 layer or 4 layer elastic compression systems; cohesive inelastic short stretch and hosiery kits are recommended.

For those with VLU and oedema to the foot, lymphoedema or lymphovenous oedema, cohesive inelastic compression bandages are recommended

If there is no marked improvement within 6 weeks, a change to an alternative compression bandage system is recommended

Discussion

- The guidance provides clinicians managing lower limb conditions with an evidence based underpinning for practice.
- A more holistic approach in terms of guidance will promote holistic assessment and management; ensuring that those with lower limb problems, without a wound, also receive the required care
- The VenUS IV trial (Ashby et al. 2014) highlights the patient-centred, clinical and cost benefits associated with using hosiery kits for leg ulcer healing; whilst recently published International consensus (Harding et al. 2015) highlights the benefits of stiffer systems (e.g. inelastic cohesive compression bandages) in terms of bandage selection

Conclusion

The chart was introduced to drive high quality lower limb care to deliver clinical effectiveness and consistency across the organisation. This, in turn, should have a positive impact on patient quality of life and deliver cost improvement.

References

- Ashby RL, Gabe R, Ali S, et al (2014) Clinical and cost-effectiveness of compression hosiery versus compression bandages in treatment of venous leg ulcers (Venous leg Ulcer Study IV, VenUS IV): a randomised controlled trial. The Lancet, 383(9920) pp871–9.
- Harding K, et al (2015). Simplifying venous leg ulcer management. Consensus recommendations. Wounds International. Available to download from www.woundsinternational.com