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Using easywrap® to manage a patient with lymphoedema and venous leg ulcers

Caron Fletcher, Margaret Morrison

Compression is widely recognised as a vital component for healing venous leg ulcers (VLUs), for preventing them in at-risk patients and for long-term management to reduce recurrence. With current pressures on nurses to try to find resource and time saving solutions in patient care, management of complex wounds can prove challenging – compression bandaging is time and resource intensive and suitably competent staff often too few. As an alternative option, adjustable compression wraps can be an innovative solution in wound management and can successfully replace bandaging for patients with or without lymphoedema who have a VLU. This case report describes how the multidisciplinary team (MDT) approach to care for a patient with lymphoedema and bilateral leg ulcers achieved effective wound healing as well as reduction in swelling by using adjustable compression wraps, i.e. easywrap® strong. Successful team working between the treatment room, tissue viability nurse and patient resulted in patient empowerment, self-care and long-term support from the lymphoedema clinic.

KEYWORDS:
■ Venous leg ulcers ■ Lymphoedema ■ Compression wraps
■ Self-management

The burden of lower limb wounds on stretched community nursing services is well documented. In 2017/2018, 81% of the total NHS budget, £8.3 billion, was spent on wound management in the community setting (Guest et al, 2018). From 2012/2013 to 2017/2018, the annual prevalence of wounds increased by 71%, with an estimated 3.8 million patients presenting with a wound being treated by NHS services (Guest et al, 2020).

Non-healing and recurrent venous leg ulcers (VLU) contribute significantly to the burden of chronic wounds and are not uncommon. A recent Wounds UK Best Practice Statement focusing on and emphasising the importance of prevention, encourages a change of mindset for all healthcare workers so that 'at risk' individuals can be identified and preventative measures put in place early (Wounds UK, 2024), possibly reducing this burden on NHS services.

'If started early, compression can achieve effective healing in VLUs, as well as prevention in at-risk patients.'

COMPRESSION THERAPY

Compression is recognised as the mainstay of treatment for patients with lower limb wounds (Atkin and Byrom, 2022) and is recommended as first-line treatment for leg ulceration caused by venous and/or lymphatic insufficiency (Stanton, 2024). If started early, compression can achieve effective healing in VLUs, as well as prevention in at-risk patients (Fletcher et al, 2016). Long-term compression should also be seen as key in preventing ulcer recurrence, with the National Wound Care Strategy Programme (NWCSP, 2024) confirming that treatment outcomes are improved with earlier intervention using compression. The NWCSP (2024) advocates that following comprehensive assessment, all people with suspected venous disease and adequate arterial supply should be offered strong compression therapy. For those with leg ulcers, the recommendation is that the therapeutic dose for promoting healing should be at least 40mmHg at the ankle if provided by an elastic compression system or, in accordance with 'manufacturers' recommendations', if using an inelastic system (NWCSP, 2024).

However, those working in this area will be well-aware of the reluctance of many patients to wear compression, either garments or bandages. Inability to tolerate compression may be due to several factors, including:

- Stockings may feel uncomfortable or too tight, possibly rolling down and cutting into the skin
- The fabric may feel 'scratchy'
- Stockings or bandages may not be seen as aesthetically pleasing
- Compression may feel too hot in the summer months

(Paling and Macintyre, 2021).

Healthcare professionals may also be reluctant to introduce compression

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into the patient's care plan. However, misunderstanding around compression being uncomfortable or painful, or causing injury to the patient, should be addressed. Where time pressures on clinicians prevent them from exploring the different available compression options, they should be encouraged to spend time at the outset, as this will reduce the time spent needed for patient management in the long term (Stanton, 2024). Patient engagement should be seen as key to improving treatment outcomes, as non-concordance can result in delayed healing, worsening of symptoms and other complications, resulting in poor outcomes and higher management costs (Stanton, 2024). In the authors' clinical experience, when choosing the most appropriate compression for the patient, both physical and psychological factors need to be taken into account and all the necessary information should be made readily available – remembering that if one form of compression is not suitable, alternatives can usually be found.

The 2019 'NHS Long Term Plan' advocates that supported self-management should be encouraged for those people willing and able to undertake some aspects of their leg ulcer care themselves, stating that this should be seen as part of the commitment to make personalised care the 'norm' for patients (NHS England, 2019). Therefore, clear explanations about the reasons and importance of wearing compression should be given to help with prevention and to reduce risks for individuals with factors such as pain, oedema and skin changes (Fletcher et al, 2016).

ADJUSTABLE COMPRESSION WRAPS

Wraps have been found to be a suitable alternative to bandaging when treating patients with lymphoedema who also present with a static wound (Cox and Bousfield, 2021), with Mosti et al (2020) suggesting that stiff adjustable compression wraps may be more effective than non-elastic bandages in healing venous leg ulcers. Wraps can also replace garments for longer term management of lymphoedema and to prevent ulcer recurrence. Although the National Institute for Health and Care Excellence (NICE, 2025) states that the price of wraps is not justified when compared to other compression products, it acknowledges that they offer a cost-effective solution when they are the only suitable option. Evidence from case studies demonstrates that they are a suitable method of treatment, helping to manage resources more effectively and efficiently, and improving patient concordance by being easier to don and doff (Lee, 2019). Furthermore, being adjustable and easier to remove than garments, wraps put the patient in control of their lymphoedema. This makes it easier to carry out regular skin and wound care, thus supporting self-management (Lee, 2019).

'Patient engagement should be seen as key to improving treatment outcomes, as non-concordance can result in delayed healing, worsening of symptoms and other complications, resulting in poor outcomes and higher management costs.'

In the authors' clinical experience, with little clear guidance currently available, healthcare professionals have had to rely on their clinical experience and individual preferences when deciding on which adjustable wrap to choose for patients. However, Phillips and Wright (2024) demonstrate that an adjustable wrap should give the stated pressure on application, have a good working pressure to achieve oedema reduction, along with a good tensile strength to avoid the product losing its shape overtime.

Mindful of the issues around compression and ulcer healing (as mentioned above), the following case report demonstrates how a patient with work commitments who was unable to attend regular clinic appointments for bandaging, and due to her leg-shape was not suitable for a hosiery kit, benefitted from using an adjustable compression wrap, easywrap® strong (Haddenham Healthcare), as an alternative form of compression.

CASE REPORT

Easywrap strong was chosen for this patient's treatment for several reasons, for example, it is:

- A short-stretch garment
- Engineered to give consistent graduated compression
- Designed to mimic the standard 50% overlap of a traditional bandaging system

(Lee, 2019).

It is also a low-profile wrap (can be worn discreetly), which was suitable for the patient when at work. The overlapping straps and simple hook and loop fasteners on one side make it easy to apply, and the design of the garment aims to reduce the risk of kinking, with patients reporting that it is easy to don and doff and comfortable to wear (Hampton, 2024).

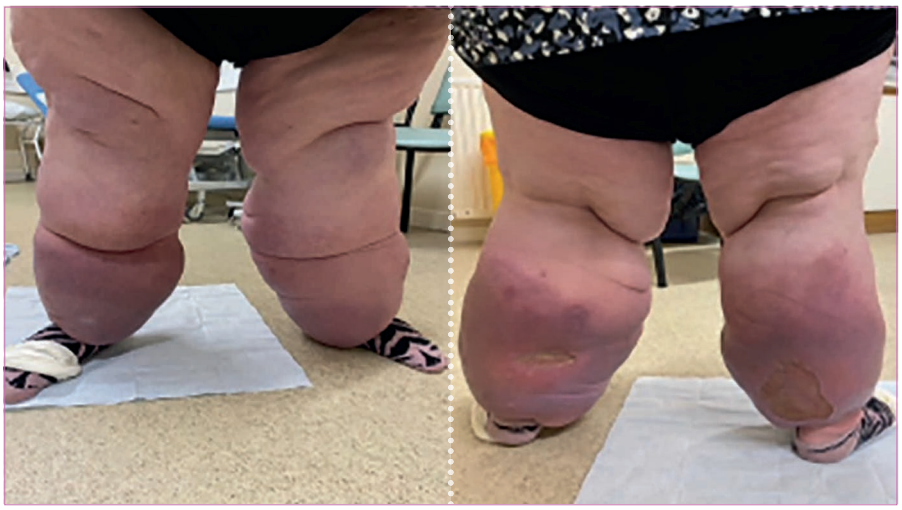
Ethical aspects

The patient gave her full, informed consent for information and images to be shared, and she is not identifiable throughout this case study.

Patient information

Ann was 41 years old, worked full-time, and apart from tonsillitis in 2022 her past medical history included eczema to her neck and legs, for which she had been under the care of the dermatology specialist nurses since 2016, and obesity. Her only prescription medication was an antihistamine, and she used topical products for her skin, both for washing and for application.

Ann had struggled with large, heavy sore legs for about 15 years, but in mid-2024 she became anxious about a red, blistered, weeping area which had developed on her right lower leg. She thought this may be infected and decided to contact her GP, who prescribed antibiotics for cellulitis. At her next review with the dermatology specialist nurse, leg ulcers and probable lymphoedema were diagnosed and compression



Figures 1 and 2.
Patient images – November 2024.

hosiery was recommended as the best course of treatment (*Figures 1* and *2*). Ann was referred to the treatment room nurses at the GP practice for wound management and the tissue viability nurse (TVN) also became involved at this time to support with the direction of care. Contact was made with the lymphoedema service, but they were unable to see Ann while she still had active wounds. She therefore continued to attend the treatment room every two weeks for review and wound dressings, carrying out self-care of the wounds herself at home in-between her appointments.

Ann was not wearing compression due to it not being prescribed. Although she felt that there had been some improvement in the ulcers, this seemed to plateau towards the end of 2024 and the ulcers remained unhealed.

In January 2025, she developed cellulitis on her left lower leg and was again treated with a two-week course of antibiotics. It was agreed that she needed some form of compression. The size and shape of her legs ruled out the use of hosiery, and as bandaging was not an option due to Ann's work commitments, compression wraps were discussed with her, which she agreed to try. Easywrap strong was chosen, as this would enable Ann to continue with wound dressings herself, reapplying her wraps independently and ensuring ease of bathing or showering. The treatment room nurse contacted the company representative for support due to the nature of Ann's wounds and shape of her legs. A joint visit took place in January 2025, and from that point Ann continued to be seen every two weeks by the treatment room nurse and TVN, with the Haddenham representative present for advice and support with measuring and compression.

Clinic appointments 1 and 2

As Ann's leg measurements at the initial appointment were larger than the easywrap which was available that day (*Table 1*), it was decided that to ensure a good fit on the right leg, two additional extension bands would be added. The leg and foot pieces were applied to the right leg, and full instructions on donning and doffing the wrap were explained to Ann. The left leg measurements indicated that a larger size was needed, so easywrap foot, leg, knee and thigh pieces for both legs were ordered by the treatment room nurse, with the aim being to fit these at the next clinic appointment. Wound care and dressing regimens were selected and recommended by the TVN, based on the wound's clinical presentation and treatment objectives as per the local formulary. These regimens were continued throughout Ann's care and for the duration of this case.

At the second clinic appointment two weeks later, Ann had developed cellulitis to her left leg (*Figures 3* and *4*) and had been prescribed a 14-day course of antibiotics as per British Lymphology Society and Lymphoedema Support Network guidelines (BLS/LSN, 2022). As Ann reported pain in the left leg, it was agreed not to apply any compression to this leg until the antibiotic course had been completed and the pain had settled (BLS/LSN, 2022). There appeared to be two new wounds at the front of the left leg which, together with the posterior wound, were sloughy. The wound on the right leg had reduced in size compared to previous measurements (*Figure 5*; *Table 1*).

To aid healing of the ulcers, it was agreed by the TVN that Ann should

Figures 3 and 4.
6th February 2025, showing reduction in size of right leg and cellulitis and posterior ulcer on the left leg.

Figure 5.
Showing improvement in ulcer on posterior right leg.

wear the knee and thigh garments on the right leg. However, as these were not yet available, it was decided that Ann would continue to wear the foot and leg pieces on the right leg until her next appointment.

Despite initially finding it difficult to put on, wear and adjust easywrap, Ann was now managing both foot and leg pieces well. She stated later that she had been determined to persevere with wearing easywrap, as she felt that doing so would improve her life – a goal that she kept in mind.

Ann had also been wearing the easywrap at night, only removing them to wash and redress her leg. She felt that there was a reduction in the right leg, which was evident visually and on measuring (*Table 1*). The left leg was not measured at this visit due to cellulitis.

Clinic appointment 3 (four weeks since baseline)

The cellulitis on the left leg was now much better and, as stated by the patient, this leg was now less painful (*Figures 6* and *7*). Ann was in good spirits and was now managing very well with applying the foot and leg garments to her right leg. The knee and thigh garments had arrived and these were applied to the right leg, giving her full leg coverage with easywrap.

Following discussion with Ann, it was decided to apply only the foot and leg pieces to her left leg. This was partly because she still had some pain in this leg following the cellulitis, and also because she was just beginning to wear the full leg easywrap on the right leg and, as she was continuing to go to work, she wanted to be sure she felt comfortable and safe before agreeing to full coverage on both legs. With Ann's agreement, the plan was to apply the knee and thigh pieces to her left leg at her next appointment.

The ulcer on the posterior aspect of the right leg had reduced in size, underlining the importance of compression in leg ulcer healing. The ulcer on the left leg, where no compression had been worn, had increased in size and remained sloughy, which was possibly also due to having had cellulitis in this leg.

Clinic appointment 4 (six weeks since baseline)

At this visit, Ann reported that she had been managing well with the full leg easywrap on her right leg and the below-knee leg and foot pieces on her left leg. Following discussion, Ann agreed to have the thigh and knee pieces added to her left leg. She had continued to wear the wraps overnight, and so the option of changing to Comfiwave® (Haddenham Healthcare) for night-time was discussed with her – she thought that she would like to try this and to be measured at her next appointment.

Comfiwave can be used in primary or secondary lymphoedema and chronic oedema as a stand-alone treatment or as part of combination treatment where reduced compression is indicated, demonstrating how effective and versatile it can be (Phillips and Lawrance, 2020; Atkin, 2025). It was originally intended for night-time wear and, as such, this would be a useful addition at this stage to Ann's treatment plan.

At this visit, there was evidence of the upper aspect of the right leg wound closing over with new tissue formation (*Table 1*). The left posterior wound had also reduced in size and the anterior wounds were now dry (*Figures 8* and *9*). In addition, Ann was pleased to report that she had lost around one stone nine pounds since starting to wear compression.

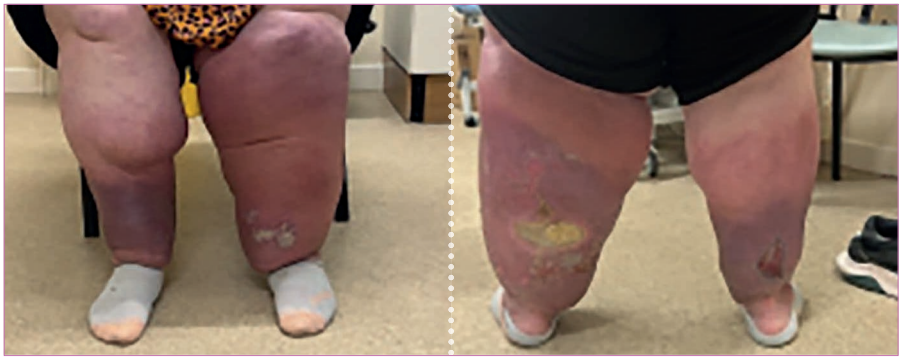
Clinic appointment 5 (eight weeks since baseline)

Ann had continued to manage well with her compression wraps, and further reduction was noted on the right leg, which now fitted into a medium-sized easywrap (*Table 1*). This was to be ordered together with thigh-length Comfiwave for use in the evening and overnight.

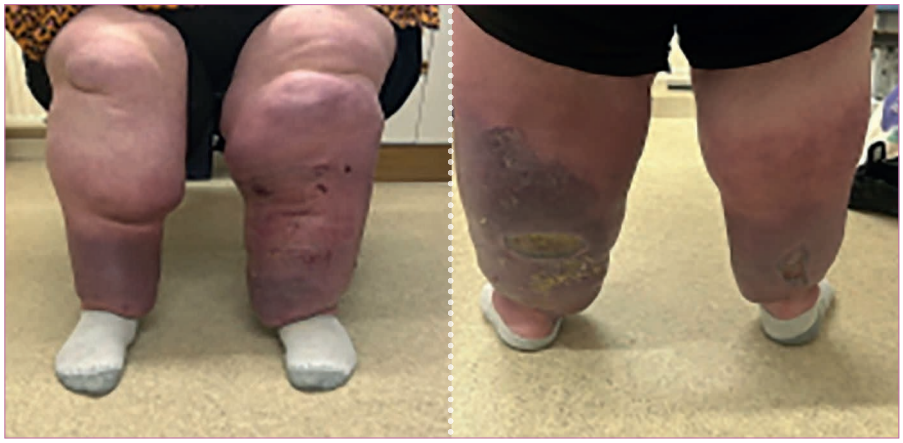
Overall, the right leg had continued to reduce in size and, since wearing compression, the left had also begun to reduce more effectively. The ulcers were visibly smaller, with the right leg having just three small wounds, although wound measurements were not taken.

Clinic appointment 6 (10 weeks since baseline)

Ann was happy with the results; the left leg was reducing well and



Figures 6 and 7.
There is improvement in the size of the right leg and in the right posterior ulcer. The left posterior ulcer shows slight deterioration; however, cellulitis in the left leg has improved.



Figures 8 and 9.
Six weeks since baseline, showing improved healing.

Figure 10.
18th March, showing further reduction to Ann's right leg in particular.

Figure 11.
10 weeks from baseline showing continued improvement in Ann's skin and leg size.

she was delighted that the wound on the right leg had now healed (*Figure 11*). Although there had been a delay in ordering the Comfiwave garments due to missing leg length measurements, this measurement was taken and the Comfiwave ordered.

Because oedema had reduced in both knees and thighs since Ann had first started wearing the wraps (*Figure 1*), it was suggested by the visiting Haddenham clinician that easywrap in a smaller size should be ordered. Now that the right leg wound had healed and the left was very nearly healed, Ann would be able to be seen in the lymphoedema clinic as soon as an appointment became available, and so the treatment room nurse followed-up this referral.

Final clinic review (22 weeks since baseline)

Ann's left leg measurements had reduced by between 20 and 28cm at the ankle and calf, and 5cm at the thigh; with her right leg, which had been the less severely affected leg, reducing by 15cm at the ankle and 9cm at the thigh. The remaining lymphoedema was now more evenly distributed over both legs, giving a more aesthetically pleasing shape and appearance to her legs (*Figures 12* and *13*). A small dry plaque on the left leg was removed, leaving healthy skin and ulcer healing to both legs. New easywraps were ordered in smaller sizes. No further follow-up appointments were considered necessary with the treatment room nurse, with Ann now being followed up by the lymphoedema service.

Patient perspective

Ann had struggled with large, heavy sore legs for 15 years before presenting to her GP with cellulitis in mid-2024. She thought this was something she would just have to learn to live with and, as is common for those with large lymphoedematous legs, Ann usually wore long skirts or wide trousers to cover up her legs. Her mobility had begun to deteriorate and she was no longer able to carry out some activities she used to enjoy, particularly attending music concerts, as she was not able to stand for long periods.

Towards the end of her treatment Ann wrote the following statement:

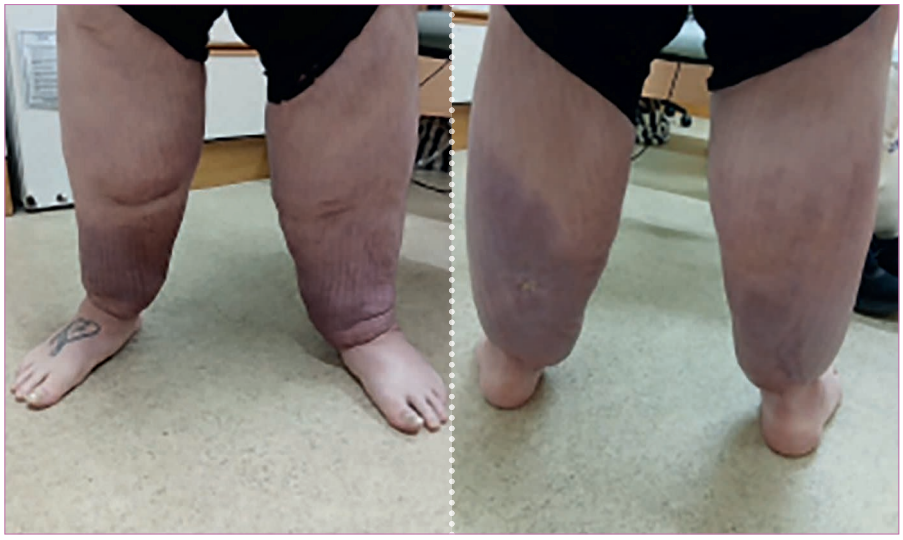
> *Since wearing the wraps my legs are much lighter, and they definitely don't ache so much. I can stand for longer and walk further and I don't feel that everything is such a struggle any more. Not only have I noticed the improvement, but friends and family have noticed the change in both my legs and in me generally. I don't feel so uncomfortable all the time and my quality of life is far better too.*

In addition, at Ann's final clinic appointment, she spoke to the treatment room nurse about the success of her treatment regimen and how her life had been changed. She recently danced at a friend's birthday party for the first time in years; she had managed to stand at a Robbie Williams concert without experiencing pain the following week, which was what had happened after a previous concert before she started wearing easywrap; and she had even bought herself a pair of shorts.

Discussion

The addition of compression to Ann's treatment plan was recognised by the treatment room nurse and Ann herself as being the turning point when both the oedema and the leg ulcers had begun to improve. While it is not unusual for individuals with leg ulcers to present with poor skin integrity, which can become exacerbated by compression bandaging/kits if skin care routines are not performed frequently enough (Lee and Lawrance, 2019), Ann's skin condition had improved consistently throughout her treatment (*Figure 12*). This supports earlier case studies where skin integrity improved using easywrap (Lee, 2019).

Since first meeting Ann on 21st January, it had taken 10 weeks and



Figures 12 and 13.
22 weeks since baseline – Ann's final clinic appointment, showing healed ulcers, improvement in skin and reduction in limb size.

only six clinic appointments for the wound on the right leg to fully heal. Due to cellulitis and the left leg being more severely affected with lymphoedema, healing of the left leg wound took longer. However, by her review appointment 22 weeks since the first appointment, full healing had taken place on the left leg too.

Ann continued to self-care at home in between appointments. Thus, there were no additional costs for nursing staff as Anne removed and reapplied the wrap and carried out skin and ulcer care herself. Importantly for Anne she was able to continue working throughout this treatment programme and, as her leg size improved, the wounds started to heal with less leakage and reduced pain. This underlines how easywrap can enable patients to be independent within a self-care treatment programme, and confirms that compression enhances wound healing of the lower limb. Furthermore, the treatment room nurse noticed a transformation in Ann's confidence from when they first met, recognising the positive effect that this had not only on Ann, but also on herself by being part of positively changing this young lady's life.

CONCLUSION

This case demonstrates that when treating a patient with lymphoedema who presents with a static wound, easywrap strong is a suitable alternative to bandaging, offering a cost-effective method of treatment which improves both patient concordance and effective management of resources. In addition, easywrap can aid in self-management of leg wounds, freeing up nursing time and encouraging patient self-responsibility for effective long-term leg care. JCN

Table 1: Measurements of both limbs and wound sizes (cm) at each clinic visit. NB: Due to Ann having cellulitis in the left leg and only wearing compression to the knee on the right leg, on 6th February only the lower right leg circumferences were measured

Appointment	Baseline		2/52		4/52		6/52		8/52		10/52	
Circumferences:	R	L	R	L	R	L	R	L	R	L	R	L
B (minimum circumference of the ankle)	48	64	37		33	45	37	45	33	42	32	44
C (widest circumference of the calf)	61	81	63		67	80	53	61.5	60	61	57	56
E1 (circumference at the bottom of the thigh or just above the knee)	79	80					75	80	74	77.5	74.5	75
G (widest circumference of the thigh)	90	88			83	89	81	89	82.5	82	83	82.5
Wound sizes	R	L	R	L	R	L	R	L	R	L	RL	
Horizontal	8	9	8.5	6	7	10	2.5	8.5	1.8/0.5	8	NA	5.5
Vertical	11.2	5	4.4	11	3.5	3.5	2	4	1/0.5/1.5	4	NA	2
Left anterior wounds				6x4 4x4		NM		NA NA	Now 3 small wounds			

NM=not measured; NA=not applicable as wound(s) now healed.

REFERENCES

Atkin L (2025) Use of Comfiwave® in patients with lower limb swelling and ulceration. *J Community Nurs* 39(6): 30–5

Atkin L, Byrom R (2022) The links between heart failure and leg oedema: the importance of compression therapy. *Wounds UK* 18(3): 22–6

British Lymphology Society, Lymphoedema Support Network (2022) *Guidelines on the management of cellulitis in lymphoedema*. Available online: www.thebls.com

Cox A, Bousfield C (2021) Velcro compression wraps as an alternative form of compression therapy for venous leg ulcers: a review. *Br J Community Nurs* 26: S10–20

Fletcher J, Atkin A, Dowsett C, et al (2016) *Best practice statement: Holistic management of venous leg ulceration*. Wounds UK

Guest JF, Fuller GW, Vowden P (2018) Venous leg ulcer management in clinical practice in the UK: costs and outcomes. *Int Wound J* 15(1): 29–37

Guest JF, Fuller GW, Vowden P (2020) Cohort study evaluating the burden of wounds to the UK's National Health Service in 2017/2018: update from 2012/2013. *BMJ Open* 10(12): e045253

Hampton S (2024) Case study 1. Highly exuding venous leg ulcers with gross oedema and varicose eczema. *J Wound Care* 33(Sup1a): S15

Lee N (2019) *An audit on the use of adjustable velcro wrapping devices as an Alternative to Compression Bandaging in the treatment of venous leg ulcers*. Poster Presentation, EWMA conference

Lee N, Lawrance S (2019) Haddenham Easywrap: an alternative to compression bandaging chronic oedema and wound care. *Br J Community Nurs* 24(Sup4): S22–S28

Mosti G, Mancini S, Bruni S, et al (2020) Adjustable compression wrap devices are cheaper and more effective than inelastic bandages for venous leg ulcer healing: a multicentric Italian randomized clinical experience. *Phlebology* 35: 124–33

National Wound Care Strategy Programme (2024) *Leg Ulcer Best Practice Bundle*. Available online: https://wounds-uk.com/wp-content/uploads/2025/03/NWCSP-Best-Practice-Leg-Ulcer-Bundle-v1.0-04.04.24.pdf

NHS England (2019) *NHS Long Term Plan*. Available online: www.longtermplan.nhs.uk/publication/nhs-long-term-plan/

National Institute for Health and Care Excellence (2025) *Compression products for treating venous leg ulcers: late-stage assessment*. Available online: www.nice.org.uk/guidance/HTE32/chapter/1-recommendations

Paling I, Macintyre L (2021) Survey of lipoedema symptoms and experience with compression garments. *Br J Community Nurs* 25(Sup4): S17–S22

Phillips N, Wright T (2024) Comparing the variation of pressure, stiffness and elasticity achieved in seven adjustable wrap systems, including easywrap strong. *J Wound Care* 33(Sup1a): S10–14

Phillips N, Lawrance S (2020) Haddenham Comfiwave: a unique compression device for lymphoedema treatment. *Br J Community Nurs* 20(4 Sup). Available online: https://hadhealth.com/assets/articles/Haddenham%20Comfiwave%20BJCN.pdf

Stanton S (2024) Lymphatic insufficiency and stiff compression in venous leg ulceration: Adjustable compression wraps: background evidence and case studies on use in lymphatic and venous disease. *J Wound Care* 33(Suppl B): S4–9

Wounds UK (2024) *Best Practice Statement: Primary and secondary prevention in lower leg wounds*. Wounds UK, London. Available online: www.wounds-uk.com

Revalidation Alert

Having read this article, reflect on:

- When you would consider changing from traditional compression bandaging to using easywrap
- The benefits you feel easywrap would have for patients with leg wounds
- How you could incorporate self-management of venous leg ulcers into your treatment plans by using easywrap.

Then, upload the article to the free JCN revalidation e-portfolio as evidence of your continued learning: www.jcn.co.uk/revalidation

KEY POINTS

- Compression is the most important therapeutic procedure for leg ulceration caused by venous and/or lymphatic insufficiency.
- Compression wraps can replace bandaging to treat venous leg ulcers and lymphoedema effectively.
- Those working in this area will be well-aware of the reluctance of many patients to wear compression, either garments or bandages.
- Patient engagement should be seen as key to improving treatment outcomes.
- Easywrap is an effective self-management treatment option for those patients who are willing and able to undertake some aspects of their leg ulcer care themselves, empowering patients to take back control of their condition.
- Easywrap is easy to don and doff, giving consistent graduated compression, and is designed to mimic the standard 50% overlap of a traditional bandaging system.
- Comfiwave can be used in primary or secondary lymphoedema and chronic oedema as a stand-alone treatment or as part of combination treatment where reduced compression is indicated.
- The case report described here shows how a multidisciplinary team (MDT) approach to care for a patient with lymphoedema and bilateral leg ulcers achieved effective wound healing as well as reduction in swelling by using adjustable compression wraps.