



People.Health.Care.



People.Health.Care.

ReadyWrap® Clinical References

21 voices on the benefits of ReadyWrap®.



21 publications
evaluating
the benefits of
ReadyWrap®



Icon Information

 Patient Benefits

 Device Features

 Medical Benefits

 Short-stretch
Compression Profile

 Oedema Reduction

 Tissue Density
Improvement

 Cost Saving

 Time Saving

 Wound Healing

 Easy to Use/Apply

 Skin Condition



							
✓	✓	✓					
	✓		✓	✓			
✓	✓	✓	✓	✓	✓		✓
✓	✓		✓				
	✓		✓				
	✓		✓				
						✓	✓
	✓		✓				✓
			✓				
			✓			✓	✓

Publications

Publication Information				
Title	Performance of an adjustable compression wrap in occupational leg swelling	Adjustable compression wraps: stretch, interface pressures and static stiffness indices	Sub-compression interface pressure measurements in vivo, comparing adjustable compression wraps and custom-made flat knit compression stockings	ReadyWrap®: case studies in practice
Authors	Taha, Benigni, Uhl, Carpentier, Filori and Bishara	Benigni et al.	Reißhauer et al.	Schofield
Year of Publication	2024	2023	2020	2019
Kind of Publication	Article	Article	Article	Case study
Journal/Information for Poster	Phlebology	International Angiology	Phlebology	Chronic Oedema
Patient Information				
Characteristics	Pilot study with healthy volunteers (healthcare professionals) experiencing occupational leg swelling, using a 3D portable HandySCAN device for the measurement of leg volumes. A total of 120 volume measurements were performed. Furthermore, reproducibility was assessed by computing the coefficient of variation for all 120 leg volumes	Comparison of different adjustable compression wraps and their characteristics in terms of stretch, pressure, static stiffness index and materials used	Bilateral lymphoedema and phlebolymphostatic lymphoedema in stage 2	Case study with three patients with different leg ulceration journeys and achieved good outcomes by using an adjustable compression system
Number	10 healthy nurses or hospital staff with leg swelling at the end of the day; age range between 18 and 45 years	5 healthy authors, 3 males, 2 females, aged 38–74	30	3
Benefits	–	–	–	See page 12
Device Information				
Features	See page 10	See page 10	See page 11	See page 12
Cost Information				
Benefits	–	–	–	–
Medical Information				
Benefits	See page 10	See page 10	–	See page 12
Positive Comments				
From Patients	–	–	Yes	–
From Nurses	–	–	–	–

Publications

Publication Information				
Title	Adjustable compression wraps are non-inferior to custom-made flat knit compression stockings in the maintenance phase of complex decongestive therapy	Supporting self-management of fragile elderly patients with oedema and a venous leg ulcer using short-stretch wrap-on compression device	Case report to demonstrate the need for selection criteria for optimal adjustable Velcro wrap prescription	Critical evaluation of bandage alternative characteristics: a case series
Authors	Reißhauer et al.	van de Eijkel and van den Wijngaard	Ehmann and Bock	Ehmann and Bock
Year of Publication	2019	May 2018	2018	May 2017
Kind of Publication	Article	Poster	Case Report	Poster
Journal/Information for Poster	Journal of Physical and Rehabilitation Medicine	EWMA Conference, Krakow	Journal of Wound Care	EWMA Conference, Amsterdam
Patient Information				
Characteristics	Bilateral lymphostatic lower leg oedema (all oedema were stage II with mild (60%) and moderate (40%) fibrosis)	Oedema and VLU	Chronic venous insufficiency, LE, obesity and chronic non-healing wounds	Patient with chronic oedema with/without wounds and Patient 1: weakness in one hand and unable to manage interlacing straps Patient 2: larger limb Patient 3: spongy/ redundant tissue
Number	30	20	9 (4 females, 5 males) (39–82 years)	3
Benefits	See page 13	See page 14	See page 15	–
Device Information				
Features	–	See page 14	See page 15	See page 16
Cost Information				
Benefits	–	–	Potential cost savings to the consumer and the healthcare professionals (fewer health professional visits)	–
Medical Information				
Benefits	See page 12	See page 14	See page 15	See page 16
Positive Comments				
From Patients	Yes	–	–	–
From Nurses	–	–	–	–

Publications

Publication Information				
Title	Meeting the practical and economic challenges of managing skin and wounds using self-care as an option for patients with lymphoedema	How can Velcro compression wrap systems contribute in wound management?	Evaluation of replacing compression wraps with a compression garment for cost and ease of use	Validity, inter-rater and intra-rater reliability of an adjustable compression device application
Authors	Kuijper-Kuip and Muldoon	de Klerk and Muldoon	Greenwood and Gwilliam	Muldoon and Hampton
Year of Publication	May 2017	May 2017	2017	2017
Kind of Publication	Poster	Poster	Poster	Poster
Journal/Information for Poster	EWMA Conference, Amsterdam	EWMA Conference, Amsterdam	WOCN Society's 49th Annual Conference (J Wound Ostomy and Continence Nursing)	SAWC Spring, San Diego, USA
Patient Information				
Characteristics	Primary and secondary LE with and without wounds	LE, venous oedema, with or without a wound	Ankle-Brachial Index test (ABI) > 0.8	Not patients
Number	20	Several	30 (15 females, 15 males) (50–90 years)	6 appliers: - 2 specialist nurses familiar with wrap systems - 3 healthcare assistants from a nursing home - 1 non-healthcare professional without any skill in application of compression
Benefits	See page 17	See page 17	See page 18	–
Device Information				
Features	–	–	–	See page 19
Cost Information				
Benefits	Cost saving may be made by: - shorter overall treatment times - involving patients in their own care instead of using costly clinic staff - reduction of time spent in the clinic	Wound treatment was much easier with the overlapping straps and took less time compared with using bandaging	- The average cost savings were \$100–\$150/week, not including the nursing visit or other wound care products - Reusable product will reduce the cost of treatment while maintaining good quality outcomes	–
Medical Information				
Benefits	See page 17	See page 17	See page 18	See page 19
Positive Comments				
From Patients	–	–	Yes	Yes
From Nurses	–	–	Yes	–

Publications

Publication Information				
Title	An updated review of the evidence for adjustable compression wrap devices in the lower limb	Multinational, pilot audit of a Velcro adjustable compression wrap system for venous and lymphatic conditions*	Selecting a compression wrap when treating lymphoedema**	The difficulty and the solution of compression therapy in a healed venous leg ulcer***
Authors	Williams	Ehmann, Whitaker, Hampton and Collarte	Hampton and Gray	Hampton
Year of Publication	2017	2016	2016	2016
Kind of Publication	Review	Article	Review	Case Study
Journal/Information for Poster	Nurse Prescribing	Journal of Wound Care	British Journal of Community Nursing	British Journal of Community Nursing
Patient Information				
Characteristics	–	VLU and/or all levels of oedema including LE	Suitable for oedema or LE	Leg swelling after venous leg ulcer
Number	–	17 (10 females, 7 males) (51–75 years)	–	1
Benefits	See page 20	See page 21	See page 22	See page 23
Device Information				
Features	See page 20	See page 21	See page 22	See page 23
Cost Information				
Benefits	- Cost savings associated with reduced use of bandaging materials - Time saved due to quicker and easier application of the devices - Application by the person or their carer, and fewer nurse visits or appointments for bandaging - Can be washed and reused over a period of 6 months, providing a cheaper option than repeated bandaging	Reduced clinic visits	- A short time for application - Can help to reduce a nurse's workload	–
Medical Information				
Benefits	See page 20	See page 21	See page 22	See page 23
Positive Comments				
From Patients	–	Yes	–	–
From Nurses	–	–	–	–

Publications

Publication Information

Title	Lymphedema compression bandages or wraps: Choosing best care for patients and for care givers	Adjustable compression wraps with overlapping straps can prevent ulcer re-occurrence in phlebolympheoedema: A case series	Clinical decision making with patients by offering compression choices. Central London Community Healthcare NHS	Improving edema and functionality using a new adjustable compression wrap	Multi-patient evaluation of an adjustable wrap compression device for venous and lymphatic disease
Authors	Ehmann	Bock	Collarte, Loty and Muldoon	Ehmann	Jones and Hollins
Year of Publication	2016	2016	May 2016	May 2016	2016
Kind of Publication	Poster	Poster	Poster	Poster	Poster
Journal/Information for Poster	Poster presentation at SAWC, Spring Conference, Atlanta, USA	Poster presentation at SAWC, Spring Conference, Atlanta, USA	EWMA Conference, Bremen	EWMA Conference, Bremen	Harrogate 2016

Patient Information

Characteristics	Lower extremity LE	Patient 1: PMH significant for DM, recurrent cellulitis, wounds with chronic PLE Patient 2: PMH significant for hypertension and bilateral lower extremity PLE with recurrent ulcers Patient 3: PMH of DM, atrial fibrillation, left below knee amputation due to diabetic foot ulcers, right leg PLE with chronic ulcers	Patient 1: Venous leg ulcer (76yo female) Patient 2: Venous related oedema (male) Patient 3: Venous leg ulcer, gravitational oedema, wound (83yo female)	Lower extremity swelling and gait dysfunction with a history of recent falls	One or a combination of chronic oedema, LE or VLU
Number	3	3	3	1	10
Benefits	See page 24	–	See page 25	See page 26	See page 27

Device Information

Features	–	–	–	–	–
----------	---	---	---	---	---

Cost Information

Benefits	Potentially minimising the number of visits	–	Device easy to apply, saving clinic appointment times and costs	With tighter restrictions on number of therapy visits and diminishing coverage for durable medical products, this device allows a more efficient and economical approach to oedema management	Reduction in appointments and appointment time (cost-effective clinically effective care)
----------	---	---	---	---	---

Medical Information

Benefits	See page 24	See page 23	See page 25	See page 26	See page 27
----------	-------------	-------------	-------------	-------------	-------------

Positive Comments

From Patients	–	–	–	–	Yes
From Nurses	–	–	–	–	–

Your comments on ReadyWrap®.

“Easy to apply, saves time during visit.”

“Easy for patients, family to apply after one training session.”

“Allows the patient to continue therapy while waiting for stockings even though the clinic was closed.”

“The wounds are healing, and oedema is managed.”

“Much easier to apply than compression hosiery for some patients with limited dexterity.”

“I am convinced I achieve pressure easily, it never cuts into skin folds.”

“Doctor was very impressed with results.”

“Patient’s wife was able to apply the wraps. They enjoyed them and the oedema was managed so well that the patient was discharged to the care of the family.”

Medical caretakers
about their experiences
with ReadyWrap.

Patients

about their experiences
with ReadyWrap.

“I wasn’t sure about it at first,
but now I cannot live without it
and wished I had received the
treatment sooner.”

“The pain has gone, it is amazing.”

“I love these wraps, they are more
comfortable than the 2-layer wraps.”

“My leg feels so much better.”

“At last I can stop wearing
bandages and start getting
on with my life.”

“Possible to remove
it before taking a shower.”

“These wraps are awesome,
I can apply them myself.”

“Easy to wear.”

“Felt lighter than previous
compression bandages.”

1) Performance of an adjustable compression wrap in occupational leg swelling

Authors: Taha, Benigni, Uhl, Carpentier, Filori and Bishara



- Application of RW at tolerable interference pressure of 40–45 mmHg measured at point B1 (ankle of the foot)
- High level of comfort
- Short-stretch compression profile (high working pressures, lower resting pressures) with a static stiffness index consistently of about 15–16 mmHg, which did not change over a garment wearing period of five hours



- Oedema reduction: highly significant changes of the leg volume after 5 hours of garment wearing time: –1.9% of the whole leg, –2.45% of the upper leg and –1.4% of the lower leg when compared to the control group

Key messages:



Enables reduction of occupational leg swelling even in healthy subjects. Leg swelling reduced also in the upper part of the leg.



Comfortable to wear.



Static stiffness index of about 16 mmHg.

2) Adjustable compression wraps: stretch, interface pressures and static stiffness indices

Authors: Benigni et al.



- Short-stretch characteristic with stretch of 60%
- Clinical effective resting pressure between 30–55 mmHg
- High static stiffness index of about 35 mmHG



- High working pressure between 50–84 mmHg
- For healing of leg ulcers, pressures of 30–50 mmHg are recommended and in those cases an adjustable compression system could be an option

Key messages:



High static stiffness index of about 35 mmHg.

Short-stretch characteristics.

3) Sub-compression interface pressure measurements in vivo, comparing adjustable compression wraps and custom-made flat knit compression stockings

Authors: Reißhauer et al.



- Mean working pressure: 33.8 ± 7.7 mmHg
- If assigning the measured in vivo resting pressures to the German compression classes, 43% candidates achieved a CCL II (23–32 mmHg) and 43% a CCL III (34–46 mmHg) after self-application
- If measuring the working pressure, even 27% of the candidates achieved pressure levels within the highest compression class (>49 mmHg)
- 73% of the study candidates reached RAL-conform pressure gradient after self-application
- The mean static stiffness index (SSI) measured is 8.2 ± 6 and is stable after a longer garment wearing time

Key messages:



Short-stretch characteristics.

High constant static stiffness index.

Pressure constant over wearing time even without readjustment of the garment.



Enhancement of therapy adherence by improvement of perceived self-efficacy.

4) ReadyWrap®: case studies in practice

Author: Schofield



- After three weeks of wearing time the ulcer had reduced in size and healing was evident
- Healing of ulcer after 12 weeks of wearing ReadyWrap. Prevention of ulcer reoccurrence after a pattern of several years of healing and reoccurrence
- The legs of the patient remained in a good condition since wearing ReadyWrap and the limb volume was reduced



- The product encouraged self-care and has led to the prevention of ulcer reoccurrence
- The product is described as comfortable and easy to apply
- Increases patient concordance
- Supports patients with preference for self-care and patient empowerment
- The product enables patients to self-apply the garment safely, meaning it may be the answer for patients in various care settings



- A clinically effective minimum of 40 mmHg graduated compression with lower resting pressures for comfort can be achieved
- Short-stretch properties for effective management of chronic oedema and lymphoedema

Key messages:



Improvement of wound healing – ulcer healing.

Prevention of ulcer reoccurrence.



Reduction of limb volume.



Easy to apply and support patient self-empowerment.

5) Adjustable compression wraps are non-inferior to custom-made flat knit compression stockings in the maintenance phase of complex decongestive therapy

Authors: Reißhauer et al.



- Easy to apply and to take off
- Patients experienced a pleasant feeling during wear (13%)
Furthermore patients found the individually adjustable pressure an advantage (13%)
- Easier to apply for patients with obesity and functional disorders of the musculoskeletal systems



- Volume reduction greater by 15.7 ± 60.1 ml on average after one day of garment wearing time when compared to the leg volume prior to intervention

Key messages:



Can reduce nursing services since easy to self-apply.



Can be used not only for medical but also for economically specific indications.

6) Supporting self-management of fragile elderly patients with oedema and a venous leg ulcer using short-stretch wrap-on compression device

Authors: van de Eijkel and van den Wijngaard



- Easy to select the correct size
- Colour coding enabled a correct overlap upon application



- Delivers effective and safe compression
- All patients achieved ulcer closure and oedema reduction in a comfortable fashion, stimulating self-management
- Within 2 weeks, often more than 3 cm ankle circumference reduction was achieved

Key messages:



Delivers effective and safe compression.

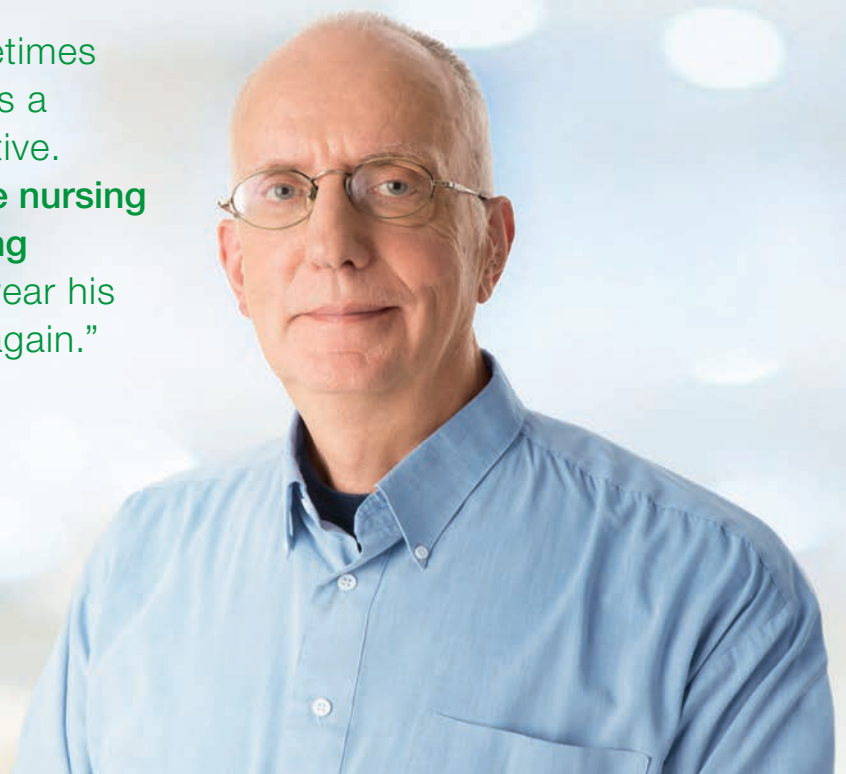
Ulcer closure and oedema reduction in a comfortable fashion, stimulating self-management.



Within 2 weeks, often more than 3 cm ankle circumference reduction was achieved.

“For compression therapy, I sometimes need to visit a patient a few times a week, which just isn’t cost-effective. ReadyWrap® helped us to **reduce nursing time**, and also **reduce the swelling** so much that my patient could wear his boots and get back on his bike again.”

Robert,
Community Nurse



7) Case report to demonstrate the need for selection criteria for optimal adjustable Velcro wrap prescription

Authors: Ehmann and Bock



- Designed to be easily applied or removed; modification of the compression level without completely removing the compression should the patient experience pain
- Patient involvement in self-application; patients themselves can be instructed in the use/care
- Adjustability (self-adjust the fit of compression)
- Product conformability
- Cost
- Allows hygiene daily



- Available in different pieces and sizes (for more customisation of the compression)
- Allows for oedema management of the whole limb, with coverage available for the foot, leg, knee and thigh sized separately; constructed from short-stretch materials, applied as straps that wrap around the limb and secured with hook-and-loop Velcro fasteners
- Resting pressure = 41 mmHg (on a healthy volunteer)
- Working pressure = 57 mmHg (on a healthy volunteer)
- Static stiffness = 16 mmHg (on a healthy volunteer)
- Application method: overlapping to eliminate the potential for skin trauma
 - ◆ Sizes available (circumference in cm – min./max. ankle, min./max. calf): S, M, L, XL, XXL, Lengths: Avg./Tall, Ankle 18/38, Calf 28/68, extender piece available
 - ◆ Foot coverage: Available but not included, comes with liner, no pressure measuring aid required
 - ◆ Posterior spine to provide vertical stability throughout the day



- Ease of application
- Can be used during both the intensive and the maintenance phases

Key messages:



Oedema management of the whole limb, with coverage available for the foot, leg, knee and thigh sized separately.



Ease of application; can be used during both the intensive and the maintenance phases.



Applied as straps that wrap around the limb and secured with hook-and-loop Velcro fasteners.

Designed to be easily applied or removed.

Patient involvement in self-application; adjustability; allows hygiene daily.



Overlapping to eliminate the potential for skin trauma.



Cost.

8) Critical evaluation of bandage alternative characteristics: A case series

Authors: Ehmann and Bock



- Overlapping straps for containment for larger limb, preventing undue loss of pressure in some areas (double coverage)
- 5 sizes
- Comes with liner
- Resting pressure = 41 mmHg (on a healthy volunteer)
- Working pressure = 57 mmHg (on a healthy volunteer)
- Static stiffness = 16 mmHg (on a healthy volunteer)
- Quality device
- No impact on functional characteristics even after user application error due to overlapping straps



- Less risk for re-ulceration
- Better containment of limbs with irregular contour, excessive size, dense swelling due to posterior 'spine' providing vertical stability
- Elimination of the potential skin trauma
- Better containment of limbs with marked tissue texture changes

Key messages:



**Static stiffness index
>16 mmHg on a healthy volunteer.**



**Less risk for re-ulceration.
Elimination of the potential
skin trauma.**

9) Meeting the practical and economic challenges of managing skin and wounds using self-care as an option for patients with lymphoedema

Authors: Kuijper-Kuip and Muldoon



- Improvement in mobility
- More independence [patients are able to participate in their care (involvement of patients in their treatment), giving them control and a better quality of life]
- Reduction in treatment time
- Leaving more time for extra-patient care



- The number of treatment episodes reduced from 3 to 2 per week
- The time for each episode reduced on average from 1 h to 30 minutes

Key messages:



The number of treatment episodes reduced from 3 to 2 per week.

The time for each episode reduced on average from 1 h to 30 minutes.

10) How can Velcro compression wrap systems contribute in wound management?

Authors: de Klerk and Muldoon



- Application of the device by the patients themselves (most of the patients) Some had help from a partner
- This device enables normal footwear to be worn when going outdoors
- Therapists have more time for other aspects of patient care in the community



- Immediate decrease in oedema
- Tissue density improved in most of these cases
- Wound treatment was much easier with the overlapping straps and took less time compared with using bandaging
- Reduction of oedema immediately following removal of the device (1 patient)

Key messages:



Immediate decrease in oedema.



Wound treatment was much easier with the overlapping straps and took less time compared with using bandaging.



Improvement in tissue density.

11) Evaluation of replacing compression wraps with a compression garment for cost and ease of use

Authors: Greenwood and Gwilliam



- Patients and family members pleased with the change
- Patient able to shower more easily and happier with the Velcro system
- Increased compliance with care



- All of the patients continued to have their oedema managed, and the wound measurements decreased as they continued to heal
- Ease of use
- Patient compliance

Key messages:



Oedema management
and wound measurements
decrease.



Ease of use.
Patient compliance.

12) Validity, inter-rater and intra-rater reliability of an adjustable compression device application

Authors: Muldoon and Hampton



- ReadyWrap, an adjustable compression wrap with Velcro, is a short-stretch compression system
- A wide blocked spine and colour-coded short straps that overlap and attach to themselves by Velcro front fastening straps to form the tubular system
- Straps fastened in the front of the limb enabling them to be seen clearly
- Overlapping straps with no gapping, leaving no area on the limb uncovered



- Excellent standing and supine pressures at 0 hr, 4 hr, 8 hr and 24 hr
- Excellent SSI of between 16 and 23 mmHg, similar to short-stretch bandage
- Similar results by experts in 4 countries
- The garment can be termed 'short-stretch' and performs well after 24 hours
- Demonstrating validity as compression for venous and oedematous conditions
- Reproducibility (reliability) of the data gives reassurance about the technique (by different applicators with different skill levels)
- Easy to apply within 1–3 minutes
- No readjustment of the straps needed
- Minimal intra-rater deviation
- Safe, appropriate patient use

Key messages:



**Performs well after 24 hours;
SSI of between 16 and 23 mmHg.**



**Easy to apply within 1–3 minutes;
safe, appropriate patient use.**

13) An updated review of the evidence for adjustable compression wrap devices in the lower limb

Author: Williams



- Fairly well tolerated (only 1 patient withdrawing from the audit due to poor tolerance of compression)
- Easy to apply in 91% of participants, and easily adjusted, leading to minimal slippage



- The ReadyWrap ACW system provides a 'lock and secure' system



- Reduction of oedema
- Tissue softening
- Improved function
- Gait and balance
- More natural limb positioning
- Limbs with irregular contour and excessive swelling were better contained by products that had a wide posterior spine, with overlapping straps appearing to eliminate the potential for skin trauma that may occur when interlacing straps are incorrectly applied (Ehmann and Bock, 2017)
- Used in the intensive phase, limb volume reduced by 5–25%, and the device was reported as preventing oedema recurrence, although the follow-up period is not specified (Ehmann et al., 2016)
- Successful management of chronic venous ulceration and oedema, healing of complex ulcers, and prevention of ulcer re-occurrence (Bock, 2016)
- Improved ulcer healing at 4 weeks, although data on ulcer size were not provided (Ehmann et al., 2016)

Key messages:



Reduction of oedema.



Tissue softening.



Easy to apply, and easily adjusted, minimal slippage.

Improved function.

Gait and balance.

Provides a 'lock and secure' system.

14) Multinational, pilot audit of a Velcro adjustable compression wrap system for venous and lymphatic conditions

Authors: Ehmman, Whitaker, Hampton and Collarte



- Alternative or supplement to traditional compression bandages or hosiery
- Management solution for the treatment and maintenance of patients with chronic venous disease with or without oedema
- The wide straps overlap, eliminating the possibility of gapping or leaving an area of the limb uncovered
- Debridement used in conjunction with compression
- Easy to apply (91% of patients)
- Very easy to apply with the 'roll and lock' technique
- 92% of mobile patients reported no interference with walking or the ability to wear footwear
- Device comfortable (9/12 patients)
- Actively participate in their care → take control of their care, promoting independence and involvement (may be able to participate in their own care or may have non-medical assistance)
- Perform daily hygiene at home
- Adjust the wrap for more snug fit as swelling reduces
- Minimise the number of pieces patients are applying
- Much easier to apply than compression hosiery for some patients with limited dexterity
- Fit into shoes within 2 sessions



- Device with a wide blocked spine (benefit for comfort and to keep the garment stable during application)
- Wide straps that overlap, eliminating the need for interlacing, pulling in opposing directions simultaneously in order to achieve proper fit
- Colour-coded short straps that fasten in the front of the limb, enabling the straps to be seen clearly (to set the straps without creating gaps)
- Garment worn continuously or removed/adjusted overnight
- Garment used during the intensive treatment and maintenance phases
- The overlapping mechanism compared favourably to other systems
- Never cuts into skin folds



- Short-stretch compression profile (high working pressures, lower tolerable resting pressures) with a static stiffness index consistently >10 mmHg, which was maintained over a 24-h period → provides optimal haemodynamic efficiency to maximise VLU healing and reduction of oedema
- The balance between garment performance and wearer tolerability noted even at night → indication of good short-stretch properties
- Wound improved within a few treatment episodes
- No reported incidents of skin damage following removal of the wrap
- Good compression therapy (stability of gait)
- Reassured that pressures were easily achieved
- Improvement in tissue density (100% of the cases)
- Volume decreased within a few treatment episodes
- Reduced clinic visits

Key messages:



Static stiffness index consistently >10 mmHg.



Limb circumference reduction within 21 days or sooner; percentage volume reduction within the limb (from 5 to 25%).



100% of the cases.



Reduced clinic visits.



Wound improved.



Easy to apply with the 'roll and lock' technique.

15) Selecting a compression wrap when treating lymphoedema

Authors: Hampton and Gray



- Very simple to apply
- The application takes a short time and does not require strength of the hands
- This product does not require a measuring tape
- Applied to a comfortable but full stretch
- Offers freedom to the patient who wishes to apply his/her own garment
- Offers a solution to patients with poor dexterity finding applying compression hosiery too difficult



- It features a long sock (which is applied first) with a foot piece and calf piece
The foot piece is applied firmly, but not stretched to capacity
The calf piece is applied at full stretch
The strips are set in twos, one with long Velcro at the tip and the other with small Velcro
The small Velcro strip is stretched over first and then the long
- Can be used toe to thigh



- Can provide a useful treatment option for patients who have poor dexterity or limited strength and are unable to apply compression bandages
- Adjustable, so can accommodate reductions in limb size as a result of compression treatment

Key messages:



The application takes a short time and does not require strength of the hands.



Adjustable, so can accommodate reductions in limb size as a result of compression treatment.



Very simple to apply; useful treatment option for patients with poor dexterity or limited strength and who are unable to apply compression bandages.

16) The difficulty and the solution of compression therapy in a healed venous leg ulcer

Author: Hampton



- Easy to apply (x1) and very easy to apply (x1)
- No appearance of a bulky bandage
- Extremely comfortable
- Easy to wear (could wear normal shoes, walk again)
- Easy to achieve the optimal compression
- The patient tends to wear it continuously, as if he does leave it off, his foot swells again



- Designed to assist both with bandaging leg ulcers and for patients to be able to apply independently or, perhaps, with assistance from friends or relations
- System simple to apply, even with arthritic hands, and carers can easily be taught to apply it



- Reduction of the ankle measurements (by 2.5 cm), calf measurement (by 1.5 cm) and below-the-knee measurement (by 1 cm)
- Dramatic loss of fluid in the leg

Key messages:



Reduction in the ankle, calf,
below-the-knee measurements.

Dramatic loss of fluid in the leg.



Easy to apply, easy to wear,
and easy to achieve the optimal
compression.

17) Lymphedema compression bandages or wraps: Choosing best care for patients and for care givers

Author: Ehmann



- Patient able continue regular shoe wear
- Patient able to apply herself daily; empowers patients to participate in their care
- Used for the interim period while waiting for custom compression garments to be made
- Successful patient outcomes with compliance
- Ease of use for patients in their self-management phase



- Volume reduction: between ≈ 15 – 22% after 1 week of treatment and $\approx 25\%$ after 2 weeks of treatment during intensive phase
- Volume reduction: $\approx 25\%$ after treatment during maintenance phase
- For intensive and maintenance phase

Key messages:



Volume reduction:
between ≈ 15 – 22% after 1 week of
treatment and $\approx 25\%$ after 2 weeks
of treatment during intensive phase.

Volume reduction: $\approx 25\%$ after treatment
during maintenance phase.



For intensive and maintenance phase.

**Easy to use for patients in their
self-management phase.**

18) Adjustable compression wraps with overlapping straps can prevent ulcer re-occurrence in phlebolymphe¹dema: A case series

Author: Bock



- Prevention of ulcer re-occurrence for greater than 1 year (patient 1)
- Decrease of fall risk measured by the Timed Get up and Go test during the course of 10 months (patient 2)
- No re-ulceration, and continued progress towards wound healing (patient 3)

Key messages:



Prevention of ulcer re-occurrence for greater than 1 year.



Continued progress towards wound healing.

Decrease of fall risk measured by the Timed Get up and Go test during the course of 10 months.

19) Clinical decision making with patients by offering compression choices. Central London Community Healthcare NHS

Authors: Collarte, Lara and Muldoon



- Patient 1: Comfortable, easy to apply, involved in her care, happy with the independence she had gained by applying the compression herself
Previously non-compliant with bandages
- Patient 2: Easy to apply, easy to walk with, comfortable to wear
- Patient 3: Easy to use in conjunction with dressings, easy to apply
→ Improvement in quality of life



- Patient 1: Reduction of the pain score and wound size, reduced swelling
- Patient 2: Oedema reduction in 2 weeks, improved mobility, self-care, adjustable according to patient needs
- Patient 3: Effective oedema reduction even with restricted mobility
→ early resolution of the condition

Key messages:



Reduction of the pain score and wound size, reduced swelling.



Easy to walk with, comfortable to wear.



Oedema reduction in 2 weeks, improved mobility, self-care, adjustable according to patient needs.

20) Improving edema and functionality using a new adjustable compression wrap

Author: Ehmann



- Patient able to continue wearing her own shoes
- Patient able to use the device not only for the intensive phase but also for the maintenance phase to retain the results of therapy
- Allows patient involvement



- Over 2-week time period, volume below knee reduced by 35%
- Functional mobility improved to allow her to ambulate short community distances and transfer herself
- Allows oedema management and gait dysfunction to be addressed simultaneously

Key messages:



Over a 2-week time period, volume below knee reduced by 35%.

Functional mobility improved.

“ReadyWrap® is so easy for patients to use that it’s helped our clinic to **reduce the number of treatment sessions** from 3 to 2 per week, and **cut treatment times by half**, compared to bandaging. My patients can regain their independence and we can keep a tight rein on costs.”

Ellen,
Skin and Oedema Therapist



21) Multi-patient evaluation of an adjustable wrap compression device for venous and lymphatic disease

Authors: Jones and Hollins



- A greater acceptance of compression versus other compression systems, leading to improved concordance
- The ability to self-care
- Improved body image
- Improved comfort



- Reduction in limb volume within a short period of time
- Wound healing
- Reduction in maceration associated with lymphorrhoea
- Improved skin condition

Key messages:



Reduction in limb volume within a short period of time.



Reduction in maceration associated with lymphorrhoea.



Wound healing.

Improved skin condition.

Overview

Title

Authors

Performance of an adjustable compression wrap in occupational leg swelling	1	Taha, Benigni, Uhl, Carpentier, Filori and Bishara
Adjustable compression wraps: stretch, interface pressures and static stiffness indices	2	Benigni et al.
Sub-compression interface pressure measurements in vivo, comparing adjustable compression wraps and custom-made flat knit compression stockings	3	Reißhauer et al.
ReadyWrap: case studies in practice	4	Schofield
Adjustable compression wraps are non-inferior to custom-made flat knit compression stockings in the maintenance phase of complex decongestive therapy	5	Reißhauer et al.
Supporting self-management of fragile elderly patients with oedema and a venous leg ulcer using short-stretch wrap-on compression device	6	van de Eijkel and van den Wijngaard
Case report to demonstrate the need for selection criteria for optimal adjustable Velcro wrap prescription	7	Ehmann and Bock
Critical evaluation of bandage alternative characteristics: a case series	8	Ehmann and Bock
Meeting the practical and economic challenges of managing skin and wounds using self-care as an option for patients with lymphoedema	9	Kuijper-Kuip and Muldoon
How can Velcro compression wrap systems contribute in wound management?	10	de Klerk and Muldoon
Evaluation of replacing compression wraps with a compression garment for cost and ease of use	11	Greenwood and Gwilliam



	✓	✓	✓				
			✓				
	✓	✓					
	✓		✓				✓
✓	✓				✓		
			✓				✓
	✓	✓	✓		✓	✓	
		✓				✓	
✓					✓		
✓			✓	✓			
	✓		✓				✓

Overview

Title

Authors

Validity, inter-rater and intra-rater reliability of an adjustable compression device application	12	Muldoon and Hampton
An updated review of the evidence for adjustable compression wrap devices in the lower limb	13	Williams
Multinational, pilot audit of a Velcro adjustable compression wrap system for venous and lymphatic conditions	14	Ehmann, Whitaker, Hampton and Collarte
Selecting a compression wrap when treating lymphoedema	15	Hampton and Gray
The difficulty and the solution of compression therapy in a healed venous leg ulcer	16	Hampton
Lymphedema compression bandages or wraps: Choosing best care for patients and for care givers	17	Ehmann
Adjustable compression wraps with overlapping straps can prevent ulcer re-occurrence in phlebolymphe ^d ema: A case series	18	Bock
Clinical decision making with patients by offering compression choices. Central London Community Healthcare NHS	19	Collarte, Loty and Muldoon
Improving edema and functionality using a new adjustable compression wrap	20	Ehmann
Multi-patient evaluation of an adjustable wrap compression device for venous and lymphatic disease	21	Jones and Hollins