

# THE USE OF NIGHT TIME GARMENTS FOR CHRONIC EDEMA MANAGEMENT IMPACTS PATIENTS' QUALITY OF LIFE AND EDEMA MANAGEMENT



J. Suzie Ehmann, PT, DPT, CWS, CLWT, CLS-LANA  
Atrium Health Stanly  
Albemarle, North Carolina  
United States of America

Karen J. Bock, PT, MPT, CWS, CLT-LANA  
Truman Medical Centers  
Kansas City, Missouri  
United States of America



## Aim

Successful management of chronic edema requires a commitment to compression bandaging, garments and/or use of alternative bandage wraps.<sup>1,2</sup> Some patients require continuous compression day and night.<sup>1,3</sup> The aim of this investigation was to assess the impact on volume control and patients' quality of life (QOL) with the addition of a nighttime garment to their compression regiment.

## Methodology

This observational study details four patients (n=4) medical history, subjective reports and objective measurements of limb volume and self-reported QOL before, during and after the addition of a nighttime garment to their compression regiment. Circumferential measurements were taken to track limb volume and The Lymphedema Quality of Life (LYM-QOL)<sup>4</sup> questionnaire was used to capture patient's self-reported improvement in quality of life. The assessment period was over a minimum of 6 weeks. Measurements were taken at three different intervals.

Presented here are focused case studies with photos and individual outcomes as well as group data.

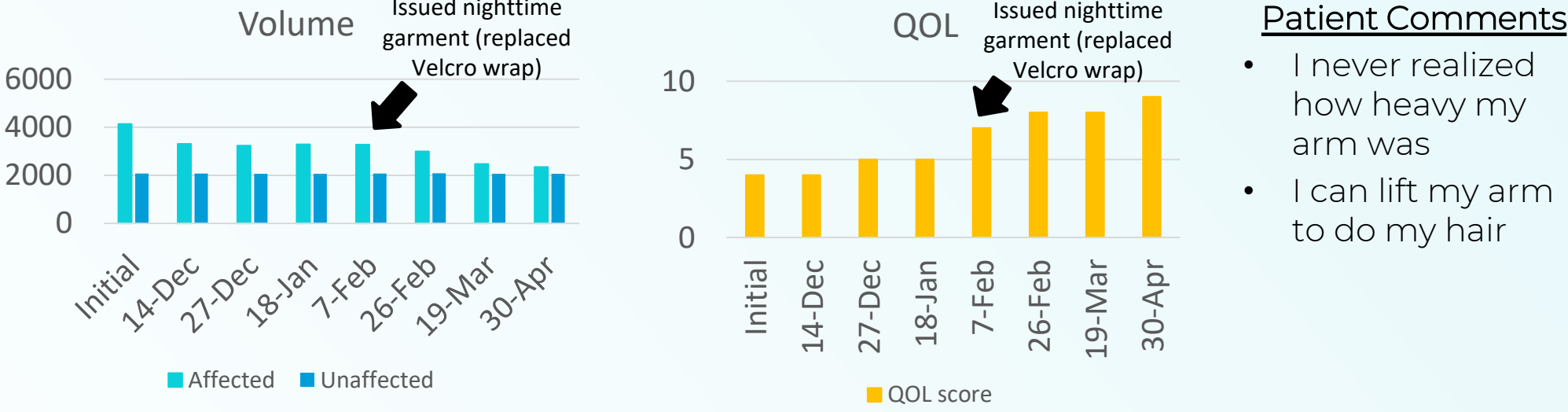
## Case Study 1

Subject is 69 year old female with secondary lymphedema following mastectomy and axillary lymph node dissection for breast cancer. Patient developed lymphedema shortly after her cancer treatment but had deferred formal therapy as she was unwilling to endure bulky bandaging. Patient with lymphedema x 10 years.

**Previous treatment:** Patient initially participated with traditional Completed Decongestive Therapy (CDT) upon initial presentation of her lymphedema. She was hesitant to complete due to bulky bandaging recalling: "I just couldn't do my house work with all those bandages"

**Intervention:** Modified CDT including periodic layered short stretch bandage for 24-48hrs, f/b using of circular knit arm sleeve of progressively smaller size. Additionally trial Velcro adjustable wrap for nighttime use. Volume of UE plateaued, and she was fit with a nighttime garment.

**Long term management options:** Patient now in compression 22hr/day -flat knit during day and nighttime garment for sleeping. Volume continues to reduce; QOL continues to improve



### Patient Comments

- I never realized how heavy my arm was
- I can lift my arm to do my hair



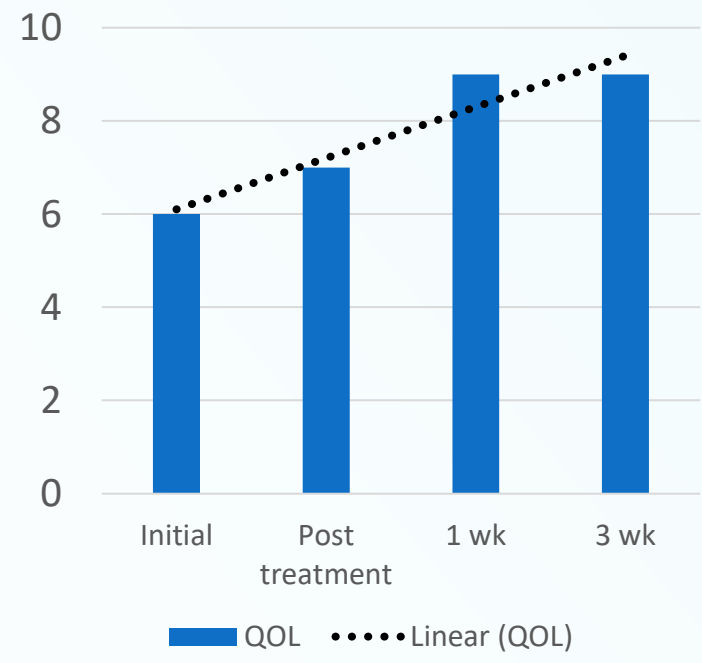
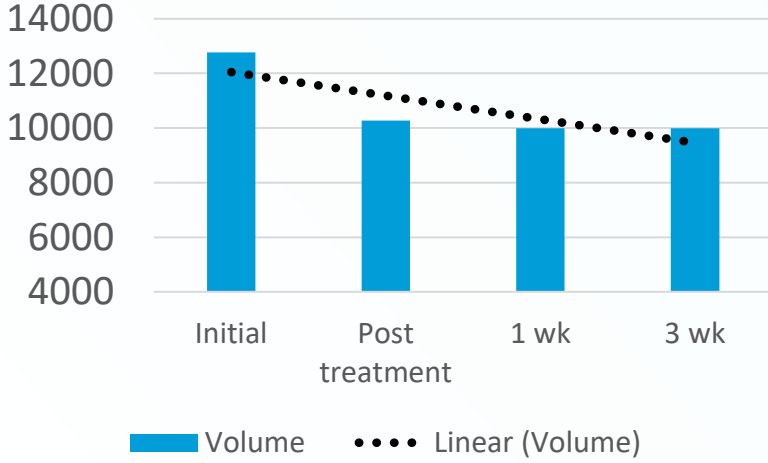
## Case Study 2

Subject is 42 year old female with secondary lymphedema following treatment for melanoma.

**Previous treatment:** circular knit garment OTC thigh high; garment did not contain swelling and was uncomfortable.

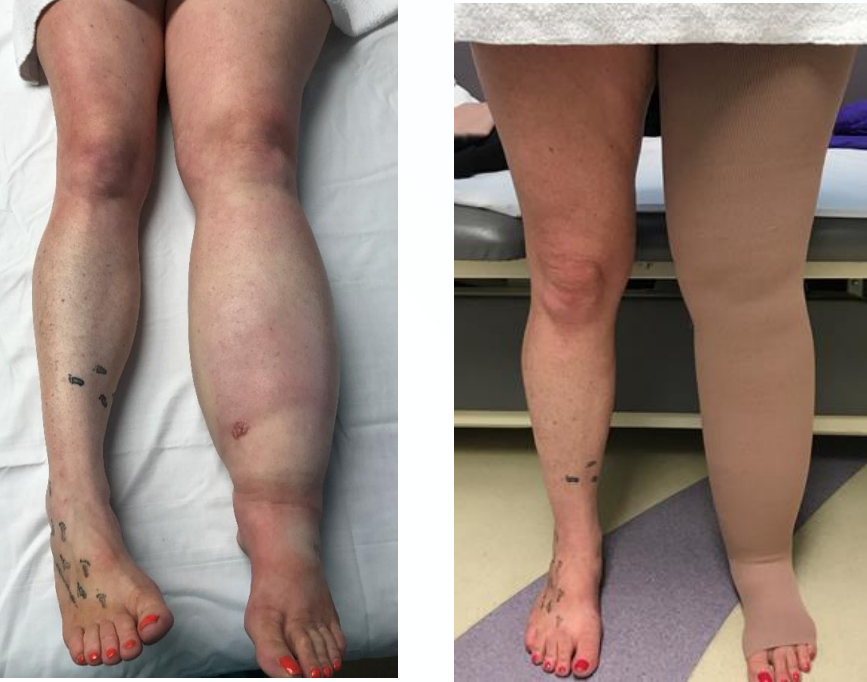
**Intervention:** CDT including manual lymphatic drainage, multicomponent lymphedema wrap, exercise for approximately 2 ½ wks.

**Long term management options:** Measured/fitted with custom day and night time garments\*\*.



### Patient comments

- I am so relieved to finally finding a way to mange my swelling



## Case Study 3

Subject is 78 year old male with primary lymphedema presented to clinic for annual garment measurement/fitting

**Previous treatment:** Patient initially used over the counter circular knit garment 20-30mmHg with only marginal control of LE swelling; Two years prior patient was fitted with flat knit garments, class III for right and class II for left. He noted better controlled of edema.

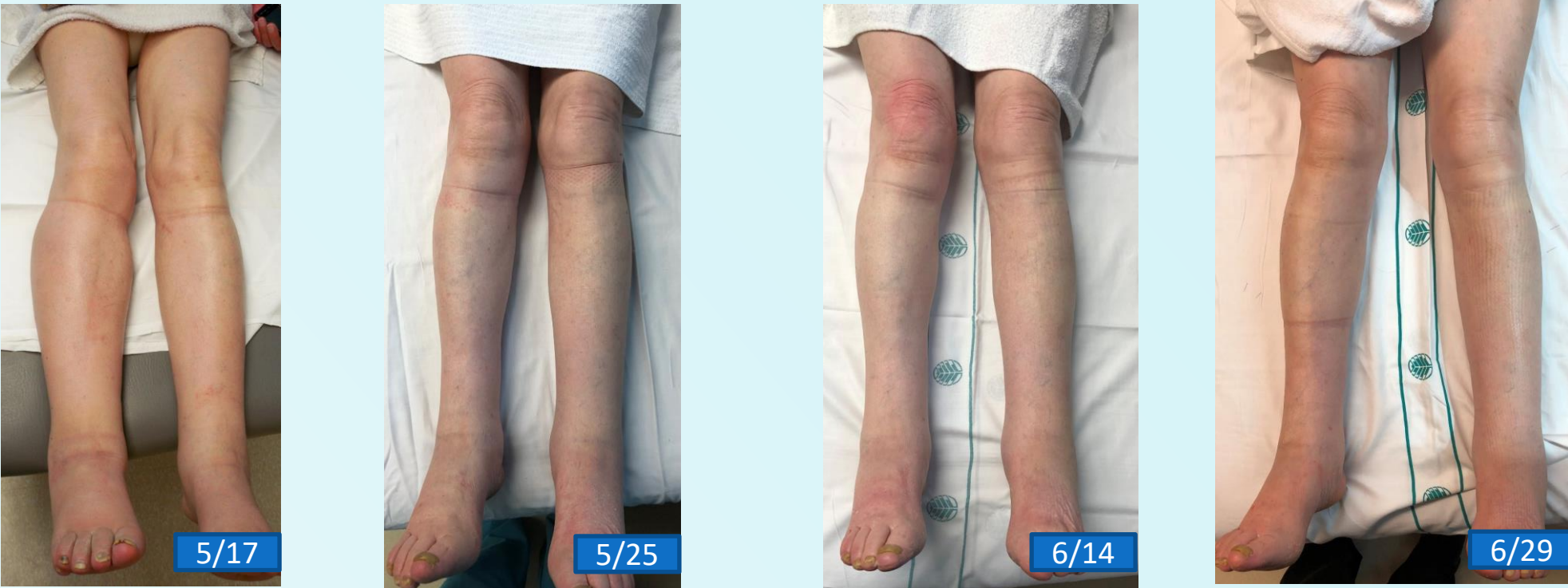
**Intervention:** Upon presentation for yearly garment measurement a nighttime garment was added to treatment regime. Patient wore class II flat knit during day and Velcro adjustable ready to wear nighttime garment at night.

**Long term management options:** Patient now in compression 22hr/day -flat knit during day and nighttime garment for sleeping. Volume continues to reduce; QOL continues to improve



### Patient Comments

- I have the best control of my swelling
- My legs are much softer than they use to be



## Case Study 4

Subject is a 38 year old female secondary lymphedema due to abdominal surgeries for Chrohn's Disease.

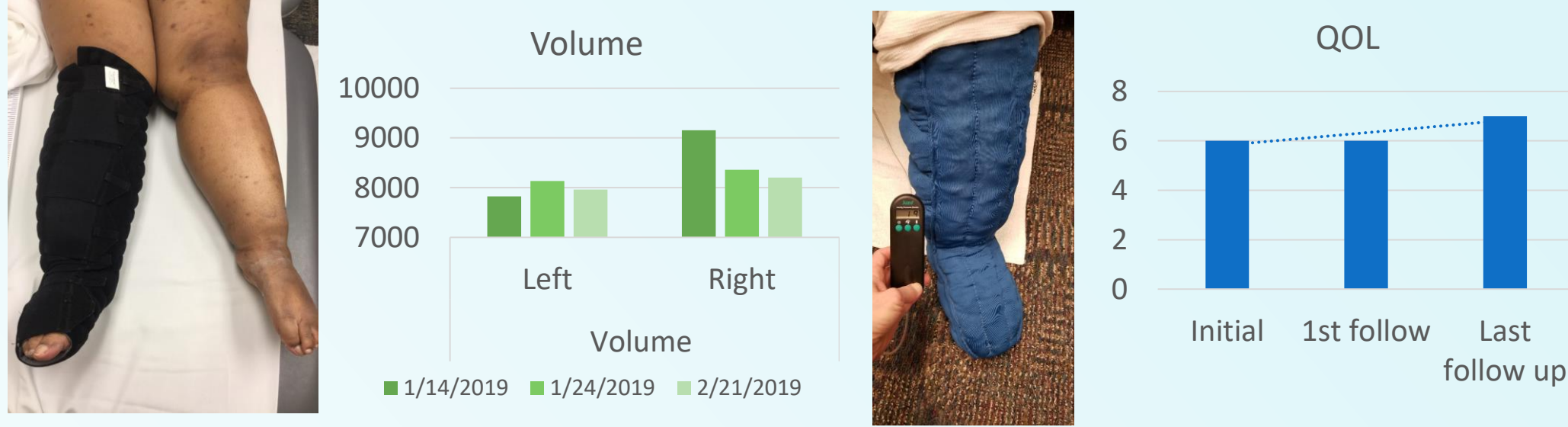
**Previous treatment:** Progression over four year period from circular knit pantyhose to custom Class 2 flat knit thigh high with continued progression of edema and poor control with garments.

**Intervention:** At most recent session patient fit with Class 3 flat knit knee high due to skin irritation with thigh garments, Still poor control of volume in lower leg when using garments during the day with only Velcro adjustable wrap for night control. Subject agreeable to trial of dedicated night time garment\* on right lower extremity

**Long term management options:** Subject had such good success with right lower extremity night time garment, she bought one for the left lower extremity\*\*\*. Subject could not afford another garment and was agreeable to use from therapist's charity stock. Some volume flux at follow up, but quality of life consistently high, now that she has 23 hour/day compression.

### Patient Comments

- It's so much easier to manage my daytime swelling with my night time garments.



## Results

It was observed that all subjects had an improvement in their self-reported quality of life (via LYM-QOL). Limb volume was stable in two out of four patients. Two out of four demonstrated further volume loss with the addition of nighttime product.

## Conclusion

The addition of a nighttime compression device demonstrated positive change in self-reported QOL as well as better overall edema management. Patients who previously had struggled with long term edema management demonstrated improved edema control. Additional investigation is warranted to study impact of inclusion of a night time garment as part of the standard of care for those patients living with chronic edema.

## References

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- Bertsch, T. Evaluation of a novel night-time compression garment: a prospective observational study. BJN Nov 2018 23(11):535-541
- Keeley V, Crooks S, Locke J, Veigas D, Riches K, Hilliam R. A quality of life measure for limb lymphoedema (LYMQOL). Journal of Lymphoedema. 2010;5(1):26-37.