# Use of an Antimicrobial Moisture Management Dressing Paired With a Gellable Fiber Technology under a Two-layer Compression System in the Treatment of Heavily Exudating VLUs Improves Clinical Outcomes and Cost Savings

**Windy Cole, DPM, CWSP**
***Kent State University College of Podiatric Medicine, Independence, OH.***

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KENT STATE UNIVERSITY College of Podiatric Medicine

Wound Care Research Clinic

## Introduction

Chronic venous insufficiency is the 7th most common chronic disease and is the underlying cause of 95% of leg ulcers.[1]

Venous leg ulcers (VLUs) are difficult to treat, often taking a minimum of 12 weeks to heal.[2]

VLUs are notoriously heavily draining wounds. This drainage contributes to the formation of excessive bioburden, devitalized tissue, and microorganisms, all of which prolong wound healing.

To effectively manage VLU exudate, dressing changes three (3) or more times weekly are not uncommon

More frequent dressing changes increase the overall cost of care and may contribute to delayed wound healing via disruption of the wound and exposure to external contaminates.

## Methods

This single center retrospective analysis examined the impact on clinical outcomes and cost savings of a dressing combination newly available to our outpatient wound clinic.

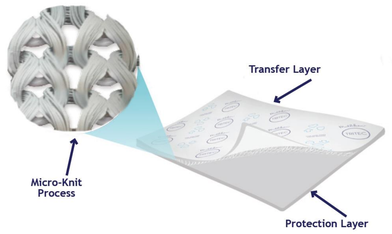
SOC dressings consisted of Non-adherent+Silver Alginate+Hydroconductive Dressing+Compression

The new treatment combination consisted of an antimicrobial moisture management dressing*, an innovative gellable fiber dressing,** and a two-layer compression system***.

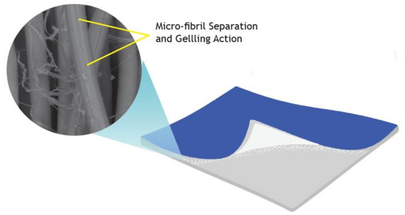
Medical records of six (6) patients who received the same standard of care treatment were reviewed for the four (4) weeks prior and the four (4) weeks after converting to the new treatment combination.

Analyzed data consisted of frequency of bandage changes, cost of wound dressings, wound size, wound tissue appearance, exudate amount, and quality of the peri-wound skin.

## Product Details




- The **antimicrobial moisture management dressing*** is two layer combined into one dressing by means of a micro-knit process.
- Pulls away excess exudate while still preserving optimal moisture at the wound bed.
- Moisture wicks from protection layer (wound facing) to transfer layer (outward facing) reducing the risk for periwound maceration.
- Requires a secondary dressing to capture the moisture being wicked through.
- Can be left in place for up to 7 days while secondary dressings and other treatments are replaced as needed.




- The **gellable fiber dressing**** provides the optimal balance between absorption capacity and structural integrity.
- While many dressings classified as alginate dressings will burst upon reaching their fibers capacity, the dressing will remain intact.
- One dressing is capable of absorbing 296% of its own weight.
- The micro-fibril gelling fibers work to absorb, transport and disperse fluid in all directions of the dressings.
- Can be used as either a primary or secondary dressing based on the clinicians needs.


- The **two-layer compression system***** gives patients more freedom and mobility.
- Short stretch performance designed for active patients with edema.
- Odor and itch control properties included within the foam 1st Layer.
- Visual indicators within the 2nd Layer guide restorative compression application and ease of application.
- System provides non-slip support while still being low profile, lightweight, comfortable, and breathable.

*TRITEC™ Silver Dressing, Milliken Healthcare Products, LLC, Spartanburg, SC. **AGILE, Milliken Healthcare Products, LLC, Spartanburg, SC.
***CoFlex® TLC, Milliken Healthcare Products, LLC, Spartanburg, SC

## Results

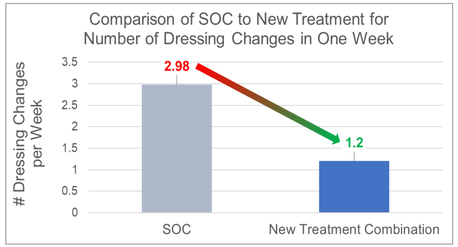



***Figure 1*** *Dressing change frequency per week for SOC versus new dressing combination*

The new dressing combination resulted in an almost 40% reduction in overall dressing change frequency.

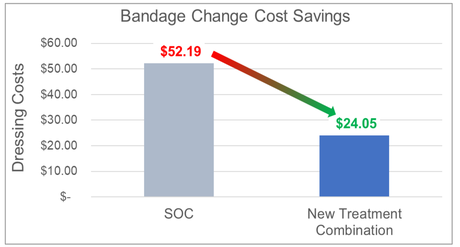



***Figure 2*** *Comparison of costs per dressing between SOC and new treatment combination.*

Cost per bandage change decreased by 46% with use of the new dressing combination.

## Discussion & Conclusion

Adoption of the new dressing regimen resulted in several notable outcomes:

- Improved management of exudate resulted in a near 40% decrease in weekly bandage changes (Figure 1).
- Per bandage cost decreased by almost half (Figure 2).
- Overall average dressing cost savings of $506.64 per patient during the 4-week new bandage adoption period, versus the 4-week SOC treatment period.
- Decreased patient visits required less clinical staff time.
- Wound area continued to progress in a positive direction.
- No treatment related adverse events.
- No patient complaints.

## References

1. Eberhardt R, Raffetto J. Chronic Venous Insufficiency. Circulation. 2014;130:333–346

2. Nelson EA, Adderley U. Venous leg ulcers. *BMJ Clin Evid*. 2016;2016:1902. Published 2016 Jan 15.

## For More Information Contact:

Windy Cole, DPM
Kent State University College of Podiatric Medicine
6000 Rockside Woods Blvd. N
Independence, OH. 44131 USA
Woundcare@kent.edu