

ABSTRACT: Presented at The Symposium on Advanced Wound Care (SAWC), Atlanta, GA May 2016, and Las Vegas, NV October 2016

Leva Fiber Skin Contact Layer, Fuzzy Wale Elastic Textile & Short Stretch Cohesive Wrap Enhances Venous Leg Ulcer Healing; healing stasis dermatitis decreases skin pain and enables delivery of robust compression

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Problems

Improvements in elastic compression dressing therapy for venous leg ulcers (VLUs) follow advances in textile engineering. Christine Moffatt utilized soft polyester batting, like the cotton batting of Robert Jones dressings, in contact with painful dermatitis in peri-wound skin to decrease pain and improve tolerance of elastic compression.¹ We observed that Leva fiber*, as a replacement for batting, appears to have a direct salutary effect on painful peri wound stasis dermatitis often with troublesome maceration and bacterial colonization.²

In 2006, Kozeny observed longitudinal fuzzy wale elastic compression stockinet**, the second layer in this dressing, to be effective for moving water out of subcutaneous fat, reversing the pathophysiology of venous insufficiency and healing refractory VLUs.³ Treadwell observed ulcer healing benefits of short stretch therapy to increase dressing working pressure during ambulation and to reduce resting pressure.⁴ The third layer of this dressing is a short stretch random open weave cohesive wrap that facilitates water evaporation and heat disbursement to improve patient comfort.

Methods

A thin Leva fiber skin contact layer* and a tapered fuzzy wale stockinet** were used to treat two patients with refractory VLU's over a 4 week period. Photos document details of therapy, improvement of stasis dermatitis, and ulcer healing.

Results

Levels of skin pain, clearing of peri-wound stasis dermatitis, and wound bed preparation was documented in photographs.⁵ Results are compared to standard of care controls.

Conclusions

A thin Leva fiber* skin contact layer appears to: 1. improve peri-wound stasis dermatitis decreasing pain in the limb under fuzzy wale elastic compression therapy for VLU's, 2. control skin maceration by wound exudate, perhaps by evaporation, and 3. speed wound bed preparation in compression dressings in place for 3 to 7 days.

References

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