Longitudinal Wale Elastic Compression Textile Controls Comorbid Wound Edema to Improve Wound Healing

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PROBLEM
• Bilateral Refractory VLUs present > 20 months
• Polythemia Rubra Vera Recent MI
• CHF, not taking diuretics (diuresis > 45 lbs. by day 60)
• Diabetes
• Pain disrupts activities of daily living, limits elastic compression and prevents effective wound debridement

METHODS
• Wound bed preparation, weekly debridement and topical HOCl***Rx
• Longitudinal wale elastic compression stockinet*
• Leva Fiber hydroconductive contact dressing**

OUTCOME DAY #60
• Ulcers respond to hydroconductive Rx & longitudinal wale compression
• Dermatitis pain decreases, enabling increased elastic compression
• Exudate decreased dramatically

OUTCOME
• Discharged. VLU 90% healed at week #7
• Lost to follow up because insurance coverage

RESULTS
All wounds healed. Compression therapy was comfortable on painful dermatitis, easy to don and off, easy to launder and reuse, safe on ischemic skin, and useful adjunct for wound bed preparation.

CONCLUSIONS
Fuzzy wale elastic compression, appears anecdotally to be cost effective, comfortable and to improve wound healing rates.

REFERENCES

AIM
Because edema disrupts cellular physiology, similar to arterial ischemia and diabetes, wound healing is delayed. Comorbid wound edema is notoriously difficult for patients and care givers to manage. Venous leg ulcers are a pure example of wounds that require edema control via elastic compression. In advanced wound parlance care, treating edema is essential for optimal Wound Bed Preparation. Longitudinal elastic stockinet delivers mild compression via fuzzy wales that compress just 20% of the skin surface, creating lumen per wale flows water moves out of the subcutaneous fat, is now available in Canada. This real world study evaluates a longitudinal wale elastic compression textile to control periwound edema: patient compliance, cost, safety on ischemic limbs, and impact on wound healing are measured.

METHODS
Fuzzy wale elastic compression was used to treat refractory leg wounds in five patients. Photographs document presentation, treatment, and healing.

METHOD
Wound presented with tunneling that required unroofing with curette

OUTCOME
Discharged. VLU 90% healed on Day #28

OUTCOME
All wounds healed. Compression therapy was comfortable on painful dermatitis, easy to don and off, easy to launder and reuse, safe on ischemic skin, and a useful adjunct for wound bed preparation.

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METHOD
Wound dressed with Leva Fiber and a three layer compression dressing with EdemaWear® as the “elastic engine” compression layer.

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METHOD
Longitudinal yarn compression stockinet* is fenestrated and wound covered with Leva Fiber hydroconductive** dressings.

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