# **Clinical Case Report**

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## Mixed Venous Ulcer & bio-ConeKt® Wound Matrix



Mixed Venous Ulcer A Case Report Daniel Beless, MD. Medical Director HyperbaRXs of North Atlanta, Atlanta, GA.

#### ABSTRACT

A 70 year-old male with a history of recurrent mixed venous ulcers of the left lower leg for several years was presented. Ulcers recurred despite venous ablation procedures, wearing compression garments, and good control of edema. Ulcers were minimally responsive to multiple standards of care including debridement, antibiotic therapy based upon cultures, topical medications and multiple wound treatments including the use of bioengineered grafts (including Apligraf<sup>®</sup>). This resulted in extensive scarring of the surrounding areas and contributing to microangiopathy with focal tissue hypoxia despite having strong distal arterial pulses and normal ABI measurements. The current wound had been unresponsive and remained open for 7 months.

**bio-ConneKt® Wound Matrix**, a FDA–cleared ECM-based advanced wound care dressing, designed specifically to work in the challenging microenvironment of a chronic ulcer was tried as an alternate standard of care in this patient. Combining bio-ConneKt® Wound Matrix with standard compression wrap and weekly dressing changes with silver gel, complete closure and epithelialization of the wound was achieved in 6 weeks.

#### **HISTORY**

**Past medical History:** Recurrent DVT due to coagulopathy, on chronic anticoagulation, multiple joint replacement surgeries. He had a remote history of smoking and non-diabetic.

**Prior treatments:** Venous ablations, multilayer compression wraps and compression garments, topical collagen, topical antibiotics and oral antibiotics, Bioengineered bilayer graft (Apligraf\*).

**PE:** Ambulatory male with chronic scarring and ulcer on left medial ankle, strong palpable pulses with prompt cap refill, wears 40-50 mm HG compression hose with no pitting edema on exam. Wound with generally clean pink base with mild slough.



Wound prepped but no size change for 1 month

Wound measured 2.0 x 2.5 x 0.6cm.

#### TREATMENT

2/28/16 through 3/15/16, treated with combined oral and topical antibiotics and prepped for application.

3/15/16 Wound measured 2.0 x 2.5 x 0.6 cm.

3/31/16 Applied 2 x 2 cm bio-ConneKt<sup>®</sup> Wound Matrix and secured by applying non-adherent cover layer with 4-layer compression wrap.

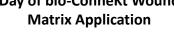
Weekly dressing changes with silver gel, and dressing with 4-layer compression wrap.

4/7/16 – minimal drainage, portions of graft remain with incorporation of tissue and epithelialization beginning.

4/22/16 transitioned to small cover dressing and compression hose.

5/19/16 Closed, will continue with cover for protection and use of compression hose.







#### CONCLUSION

This case demonstrates the successful use of **bio-ConneKt® Wound Matrix** to effectively close a complicated mixed venous ulcer that had been resistant to multiple other therapies, and in a more cost effective manner than other bioengineered products.



### bio-ConneKt<sup>®</sup> Wound Matrix

### **5 Differentiating Features**

The bio-ConneKt<sup>®</sup> Wound Matrix is a next generation, all biologic, FDA 510(k) cleared wound dressing. It is comprised of reconstituted Type I collagen that is stabilized, sterilized to SAL 10<sup>-6</sup>, and stored at room temperature.



Hydrophilic scaffold to facilitate rapid fluid absorption (0.5cc per sq. cm. of surface area)



Stabilized collagen to prevent premature digestion in wound bed



Porous matrix to enable optimal host cell infiltration



Easily conformable to ensure maximum contact with wound bed



Material designed to minimize repeat applications

#### MLM Biologics, Inc.

606 SW 3<sup>rd</sup> Ave Gainesville, FL 32601 USA Tel.844-4-MLM-BIO Fax.844-465-6246 www.mlmbiologics.com **bio-ConneKt**<sup>®</sup> is a registered trademark of MLM Biologics Inc. **Caution:** Federal law restricts sale of this device by or on the order of a physician

For additional information and/or product support, email <u>customerservice@mlmbiologics.com</u>. or call 844-4-MLM-BIO More for Less for Many PN-90-004-4-B (07/2019)