

# Healing Multiple 12-Year-Old Chronic VLUs: A Success Story Using a Thermo-Reversible Antimicrobial Wound Gel

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## revyve™ ANTIMICROBIAL WOUND GEL

### Introduction:

Chronic venous leg ulcers (VLUs) that persist for over a decade represent one of the most significant challenges in vascular nursing.<sup>1</sup> These wounds often enter a state of biological senescence, where stagnant inflammatory cycles, biofilm, and elevated protease activity prevent the transition from the inflammatory to the proliferative phase.<sup>2</sup> Standard of care often fails in these hard-to-heal cases due to the inability to maintain a consistent biochemical balance in the wound bed.<sup>3</sup> This case study explores a 62-year-old patient with a **12-year history of circumferential VLUs and significant comorbidities**. By incorporating revyve® into a comprehensive wound hygiene protocol, we demonstrate how removing biofilm and re-balancing the local environment can restart the healing trajectory in wounds that have been stalled for over a decade.

### Case Description:

**Patient:** 62-year-old female with chronic venous disease and longstanding edema of the lower leg.

**Ulcer history:** Recurrent venous leg ulcers (VLUs) since 2013. Ulcer burden at entry was large and circumferential, with multiple wounds measured

**Initial presentation:** Full-thickness ulcerations with extensive slough, intermittent necrotic tissue, and mixed-quality granulation, and indurated periwound consistent with chronic venous hypertension.

**Pain:** Severe pain (10/10) with history of fluctuation related to edema and tissue irritation

**Contributing factors:** Venous insufficiency with chronic phlebolympheoedema, obesity, and left-hip osteoarthritis; spends significant time on feet, compounding venous pressure and edema. Prior swab history notable for Pseudomonas (ciprofloxacin-resistant) in 2024.

**Previous management:** Standard venous care prior to enrollment (elevation, edema garments/hosiery, composite/foam dressings, gelling fiber; antimicrobials/biochemical modifiers as indicated).



### Conclusions:

The patient demonstrated substantial wound improvement, with total wound burden decreasing from 120.38 cm<sup>2</sup> at baseline to 18.4 cm<sup>2</sup> at final follow-up, representing an ~85% reduction in wound size. The wounds transitioned from slough- and necrosis-dominant beds to healthy granulation and epithelial tissue, alongside notable improvements in exudate quality, periwound condition, and pain stability. These findings highlight the value of re-balancing the wound environment in chronic venous ulcer patients with long-standing disease and high wound burden.



<sup>1</sup>Marston, W. A., & Davies, A. H. (2022). Venous leg ulcers: Epidemiology, pathophysiology, and treatment. *British Journal of Surgery*, 109(10), 953–962.  
<sup>2</sup>Schultz, G. S., Sibbald, R. G., Falanga, V., Ayello, E. A., Dowsett, C., Harding, K., et al. (2003). Wound bed preparation: A systematic approach to wound management. *Wound Repair and Regeneration*, 11(S1), S1–S28.  
<sup>3</sup>Posnett, J., & Franks, P. J. (2008). The burden of chronic wounds in the UK. *Nursing Times*, 104(3), 44–45