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# The V.I.P. of Diabetic & Peripheral Wounds: Preserving the Limb

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Kevin Lee is a vascular surgeon and medical lead of Royal Columbian Hospital (RCH) Limb Preservation Clinic & Vascular Lab in New Westminster, BC. He is involved in medical education, supporting faculty development, at the University of British Columbia (UBC), Vancouver Fraser Medical Program. He graduated from UBC's medical program before completing his vascular surgery residency through Western University in London, ON. He then went on to complete Advanced Aortic and Peripheral Endovascular Training in Nuremberg and Leipzig, Germany.

Alison Garten is a board-certified podiatric surgeon and a certified pedorthist. She received her BSc in biology at East Carolina University and then went on to complete her Doctorate of Podiatric Medicine at Temple University School of Podiatric Medicine in Philadelphia, PA. Dr. She completed her residency at Washington Hospital Center/Georgetown University in Washington, DC. She currently lives in Charlotte, NC, and is a wound care panel physician at a Tenet Hospital at Piedmont Medical Center. She is immediate past president of the American Association for Women Podiatrists and serves on the American Podiatric Medical Education Task Force for the National Board of Podiatric Medical Examiners. She was recently named one of the most influential podiatrists by Podiatry Management magazine.

Amanda Loney earned a BScN from the University of Western Ontario, acquired her WOCN designation from Albany Medical Center in New York and has completed the IIWCC at the University of Toronto. As a community-based nurse and educator for 26 years, she has spent the last 21 of those as a Certified Nurse Specialized in Wound, Ostomy and Continence. In her role with Bayshore Home Care Solutions, as well as in her private practice, she is known as a passionate educator and consultant, and for her extensive clinical knowledge in the areas of wound, ostomy and continence. Most recently, she has keynoted at national conferences, published in International Wound Journal, and participates on local and national advisory panels.

## Overview

Assessment of a person with a diabetic foot ulcer (DFU) includes recognition of confounding factors to minimize complications that can lead to amputation (Figure 1). The person with a DFU is a very important person, and "V.I.P." is also a helpful approach to remember the three key components of DFU assessment and management: vascular, infection and pressure.

## Advanced Therapies

The complexity and chronicity of diabetic and lower leg wounds may require the use of innovative therapies at different stages to prevent complications and promote wound healing in hard-to-heal wounds. Options for clinicians to consider (see figures 2 and 3) include:

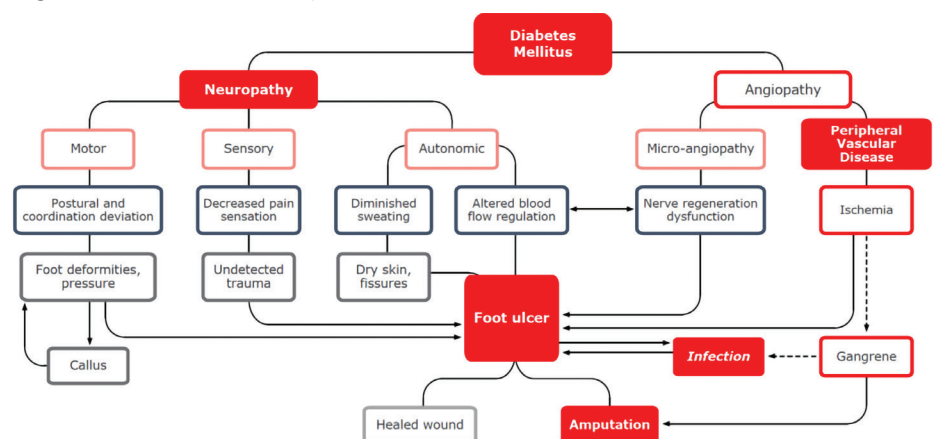
- Enzymatic debridement, through the use of SANTYL<sup>®</sup>, selectively removes necrotic tissue and prevents re-accumulation of wound debris, plus works faster and more predictably than autolytic debridement.<sup>3-5</sup>
- OASIS<sup>®</sup>, a natural extracellular matrix, acts as a scaffold to support migration and cellular ingrowth,<sup>6</sup> promoting improved epithelization and wound closure.<sup>7,8</sup>
- PICO<sup>®</sup>, a single-use negative pressure wound therapy, can be used both as a preventative measure for closed incisions, including amputations, and on open wounds. Earlier inter-

## End-Stage Renal Disease and Diabetes

The highest risk for amputation is present among patients with diabetic foot ulcers and end-stage renal disease (ESRD). This population has a risk of amputation that is 10 times higher than non-diabetic patients with ESRD. Furthermore, patients with ESRD have four times the risk of mortality following an amputation than those without ESRD.<sup>2</sup>

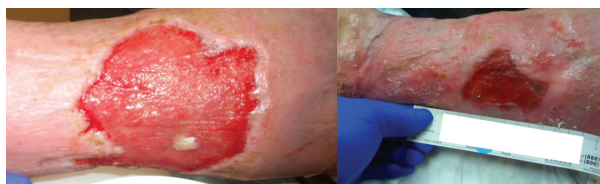
vention with the PICO<sup>®</sup> system in hard-to-heal wounds has been shown to improve the proportion of closed wounds or wounds on a healing trajectory.<sup>9</sup> In a study of patients with venous leg ulcers and DFUs, the PICO<sup>®</sup> system has also shown a greater reduction in wound depth compared with traditional NPWT at 12 weeks.<sup>10</sup>

**Figure 1. Factors Leading to Diabetic Foot Ulcers<sup>1</sup>**



**Figure 2. Case Study: Non-healing Lower-extremity Wound**

SANTYL® daily dressing changes at home in combination with aggressive manual compression therapy along with compression stocking at lymphedema clinic



OASIS® Matrix for wound management used weekly for a total of 10 applications; continued with lymphedema wraps and manual compression



PICO® sNPWT applied until closure

**Figure 3. Case Study: Non-healing Diabetic Foot Ulcer**

Wounds > 2 years old



PICO® sNPWT applied



Would closed after four weeks of PICO® plus offloading

## Conclusion

In limb preservation efforts, time is of the essence and must consider assessment of vascular status, infection and pressure (V.I.P.). Management of diabetic and peripheral ulcers by a multidisciplinary team requires the use of the appropriate products, for the appropriate patients at the right time.

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# Smith+Nephew

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