

# Use of Solventum™ V.A.C.® Peel and Place Dressing Following Delayed Surgical Healing of a Below-the-Knee Amputation

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## Patient & diagnosis

A 28-year-old male with a history of post-traumatic arthritic deformity of the lower left leg and foot had undergone previous reconstruction attempts. However, the limb was deemed beyond salvage orthopedically and a below-the-knee amputation was performed. Delayed surgical healing was observed three weeks after surgery.

## Procedure

As primary wound closure was not possible, the patient was referred for wound care (**Figure 1**). Negative pressure wound therapy was recommended to promote the development of granulation tissue.

## Initial application of Solventum™ V.A.C.® Peel and Place Dressing

Solventum™ V.A.C.® Therapy with the large V.A.C.® Peel and Place Dressing was applied over the wound and negative pressure at -125 mmHg was initiated (**Figure 2**). Dressing application times were short as only minimal trimming and shaping of the drape to fit the lower leg anatomy was required. A knee crutch provided offloading and ambulatory aid to the patient. The integrated and perforated non-adherent layer allowed negative pressure to be delivered to the wound and surrounding soft tissue.

## Treatment

After seven days, the dressing was changed. The wound bed showed rapid development of granulation tissue and a reduction of wound depth (**Figure 3**). However, increased moisture and mild irritation of the periwound skin was noted. V.A.C.® Therapy was continued with the large V.A.C.® Peel and Place Dressing and the negative pressure increased to -150 mmHg to help reduce moisture.

After seven days, the dressing was removed, and V.A.C.® Therapy was discontinued. The wound size was reduced, and areas of re-epithelialization were observed (**Figure 4**). The mild periwound irritation and amount of moisture were improved.



**Figure 1.** Wound at initial presentation.



**Figure 2.** Application of the large sized V.A.C.® Peel and Place Dressing.



**Figure 3.** The first dressing change was performed after one week of therapy.



**Figure 4.** Wound after 14 days of therapy.

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## Follow-up

Following the discontinuation of Solventum™ V.A.C.® Therapy, an antibacterial foam dressing was applied to the wound with dressing changes every seven days. After three weeks of dressing use the wound was fully healed (**Figures 5-7**).



**Figure 5.** Wound after seven days of antibacterial foam dressing use.



**Figure 6.** Wound after 14 days of antibacterial foam dressing use.



**Figure 7.** Wound fully closed after 21 days of antibacterial foam dressing use.

## Clinician experience

The V.A.C.® Peel and Place Dressing application was quick and easy, requiring only minimal trimming or shaping of the drape. The clinician observed that it would be beneficial to consider the use of V.A.C.® Peel and Place Dressing for every patient when appropriate as the wound moved through the healing continuum.

As with any case study, the results and outcomes should not be interpreted as a guarantee for warranty of similar results. Individual results may vary depending on the patient's circumstances and condition.

**NOTE: Specific indications, limitations, contraindications, warnings, precautions and safety information exist for these products and therapies. Please consult a clinician and product instructions for use prior to application. Rx only.**

Photos courtesy of Ralph J. Napolitano, Jr., DPM, CWSP, FACFAS; OrthoNeuro, Columbus, OH; Heritage College of Osteopathic Medicine, Ohio University, Athens, OH.