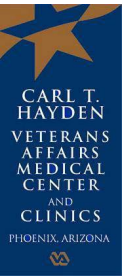




# “Prepare Your Wound Beds On The Go” - With Negative Pressure

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## Introduction:

The first step in wound healing is to remove or correct factors that impair healing. These include: proper nutrition, maintaining moisture, removal of necrotic tissue, controlling infection and maintaining an environment that promotes healing. *Wound care is an expensive endeavor. Pressure ulcers alone are a significant complication of hospital patients that can result in high treatment costs ranging from \$2000 to \$70,000 per wound. Moreover, the financial cost surrounding treatment does not begin to quantify the human cost of a nonhealing wound.* The venous hypertension dilates capillaries and increases capillary filtration. This causes edema followed by destruction of subcutaneous tissues and the formation of an ulcer.

## Results:

We present this 55 year-old male with a history of venous insufficiency, Graves disease, history of prior DVT, and a BMI of 25.7. Kalypto Medical NPWT was started on 09Jun2010 and stopped on 28Jul2010 for a total of seven weeks.

## Materials/Method:

A Kalypto Medical NPD 1000 Negative Pressure Wound Therapy System was utilized. It provides negative pressure over the wound bed, through a proprietary dressing in the range of 40 mmHg to 125 mmHg. This dressing contains one pad with two fiber types; one is hydrophilic and the other is super-absorbing. It is powered by three AA alkaline batteries. The wound contact layer is silver coated that minimizes adherence of the dressing to the wound. Kalypto Medical dressing's silver has antimicrobial action by blocking cellular respiration and disrupting bacterial cell membranes. Silver ions bind to tissue proteins causing lethal changes to the bacterial cell structures. Silver ions also bind and denature bacterial RNA and DNA. Dressings were changed 3 times per week, at home, by this patient.



Kalypto Medical NPD 1000

The Kalypto Medical dressing forms to the skin surrounding the wound with a cohesive gel, which tends to maintain structure during use. This may reduce the risk of periwound maceration, by preventing fluid from tracking through the dressing.

## Conclusions:

The Kalypto Medical NPD 1000 device goes well beyond drainage management. Our results have shown improvement in granulation tissue formation, decrease bacterial burden, protects the wound from outside environment, promotes moisture balance within the wound bed, promote increased lymphatic and venous drainage through changes in pressure on lymphatics and colloid osmotic pressure and a decrease in dressing changes. *The effect of Kalypto Medical's negative pressure becomes impressive and results in quicker healing and resolution, as complete healing occurred in 7 weeks.*

## References:

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