The Innovative Use of Soft Silicone in Conjunction with Negative Pressure Wound Therapy: Three Case Studies

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INTRODUCTION:
Wound care is a complex and ever changing field. Variables such as wound etiology, comorbid conditions, anatomical positioning of wounds and patient socioeconomic factors make each situation unique. These varied conditions drive the need for new dressings, treatments and technology and scientific advances. Effective care within this environment often requires creativity within an evidence-based paradigm. One recent development in advanced wound dressings is the use of soft silicone technology. An advantage to this type of dressing is that it is able to adhere to skin but causes no skin stripping with removal. A soft silicone contact layer** serves as an effective non-adhering contact layer for protection of the wound bed. Negative pressure wound therapy (NPWT) is another relatively recent innovation in wound treatment. NPWT, as described in the following, incorporates negative pressure with the use of open cell foam as wound filler. This therapy has been shown to dramatically enhance formulation of granulation tissue in a variety of wounds. This poster describes three cases using soft silicone dressings** with NPWT in creative ways to address the unique needs of difficult to treat wounds and peri-wound areas.

PATIENT HISTORIES:

Case Study # 1
Demographics: 78 year old male, in relatively good health, l/s blunt trauma to left knee 11/13/06. NPWT was initiated 12/21/06.

Case Study # 2
Demographics: 52 year old female with multiple medical problems, l/s CABG x 3 on 7/17/04. The surgical site subsequently became infected and dehisced open. The pt. underwent multiple surgical debridements followed eventually by mediastinal reconstruction and closure on 8/9/06. She developed postoperative pneumonia and wound break down related to a fall, requiring further surgical revision 9/7/06. NPWT was initiated on 10/17/06 utilizing soft silicone contact layer** non-adherent dressing as anastomosis for the foam dressing to allow placement into tunneled wound space.

Case Study # 3
Demographics: 52 year old male with history of paraplegia x 10 years and a 4 month history of stage 4 pressure ulcer to the left ischium. NPWT was initiated February 2007 with ‘bridging’ of the tracking system proximally to avoid additional pressure to the wound area.

CONCLUSIONS:
New technologies have led to great improvements in wound treatment for chronic wounds. NPWT has been shown to significantly improve wound healing outcomes in many types of wounds by maximizing closure. Soft silicone dressings** are known throughout the wound care industry to beatraumatic dressings and effectively minimize trauma and pain for patients. Protection of periwound skin and delicate deep structures is an important consideration when using NPWT. Soft silicone dressings** have been shown to be an effective and particularly useful adjunct in the treatment of difficult and painful wounds.

PRODUCT NOTATION
*Mepitel®, **Mepilex® Ag, †Safetac®, ‡Mepilex® lite, Mölnlycke
Health Care US, LLC. Norcross, GA.

FINANCIAL ASSISTANCE/ DISCLOSURE
Mölnlycke Health Care US, LLC, provided assistance with poster design.