Use of a Novel Contact Layer in Wound Care

Margaret Willson, RN MSN CWOCN, Manager CSM, Wound Ostomy Continence Services and Wound Healing Center, Milwaukee, WI.

Lisa Abrams Mariotti, MS, RN, Clinical Research Scientist, Hollister Incorporated, Libertyville, IL.

PURPOSE

To provide an effective, and comfortable non-adherent contact layer underneath primary dressings.

OBJECTIVE

The Wound Care Nurse is challenged with finding a non-adherent contact layer that will not disturb the wound bed under the primary dressing of partial and full-thickness wounds.

Non-adherence, ease of application and pain-less removal are important features to consider.

Case 1

C.D. was a 49 year old female who in the past decade had bilateral kidney transplants related to diabetes and two pancreas transplants. She was on chronic steroids and anti-rejection medications. In December of 2006, C.D. had squamous cell lesions removed from her upper right and upper and lower left arms. Staph aureus infection developed in both these arms and went on to become necrotizing cellulitis.

While on antibiotics, negative pressure wound therapy was started to both upper extremity wounds and "y" connected to one pump. Negative pressure was continuous at 125mm Hg. This therapy managed the wound drainage well; however, bits of the foam found their way into the wound tissue and needed to be debrided at least weekly. Edges of the wounds rolled under creating epiboli circumferentially. The right arm wound had tendon exposed and was quite painful with arm movement and very painful with dressing changes.

Thus, a novel non-adherent contact layer dressing was placed in all three wounds prior to application of the sponge used in negative pressure wound therapy. The

Case 1 Arm wound at initiation

contact layer dressing was placed to cover the wound bed as well as wound edges. A number of positive outcomes occurred with use of this novel product:

- The dressing's conformance to the wound base allowed hands-free application of the negative pressure wound therapy sponge and drape.
- Non-adherent protection of the tendon area allowed for painless arm movement with the negative pressure wound therapy dressing in place. Removal of the contact layer dressing was virtually painless.
- After a few weeks, the epiboli on many edges started softening and flattening allowing for epithelial cell migration.
- Granulation cells started to develop on the tendon which is a most difficult area to heal.

Case 1 Arm wound at conclusion

Case 2

K.B. was an otherwise healthy 59 year old very active man who suffered an Achilles tendon tear in January 2006. Subsequent to an operative repair, he developed an abscess and infection which progressed to necrotizing fasciaitis. After the infection was abated, the wound became chronic. Prior treatment included use of an amorphous hydrogel with silver, and daily dressing changes.

A novel contact layer was placed on the 11 month old wound on 01-29-07. The subject showered daily and each day placed a 1x4 inch strip of the novel contact layer over the wound. Dry gauze and paper tape were used to hold the dressing in place. Within in a month, the wound was epithiliazing. Only a small open area remained at the superior aspect of the wound by February 26, 2007. The contact layer was continued for several weeks more as the tissue was still very fragile.

Throughout the study period, the novel contact layer was rated as very easy to apply, very good conformability to the wound, and there was no bleeding or adherence during dressing changes.

Case 2: Leg wound

Case 2 Conclusion

Case 3 Knee wound

Case 3

M.M. was a 95 year old active female with a long history of venous stasis disease. She maintained her own home with little help and was independent in activities of daily living. She sustained a traumatic fall injuring the right knee area in the Autumn of 2006. The area was sutured and subsequently became infected. With treatment the infection cleared, and bi-layered skin substitute was applied. This product subsequently sloughed due to excess limb fluid. Edema management was then initiated using a stretch bandage.

Wound treatment with a novel contact layer was initiated on 01-29-07. Gauze wrap was used as a secondary dressing. The wound was 100% pale granulation tissue. The surrounding skin was dry and scaly and there was a moderate amount of wound exudates.

Throughout the study period, the wound decreased in size and depth. The patient and clinicians found the contact layer dressing very easy to use. There was no periwound maceration noted. There was no pain on dressing change.

Case 3 Conclusion

OUTCOMES

Use of the novel non-adherent contact layer dressing was associated with:

- Increased comfort
- Pain-free dressing changes
- Reduction of wound size
- Easy application and removal of dressing

CONCLUSION

This novel non-adherent contact layer dressing met the patient and clinician needs. Caregiver and patients involved in these cases were pleased with the results of using this contact layer and felt the primary goals were met.

As Presented at

The 20th Annual Symposium on Advanced Wound Care

April 28 - May 2, 2007

Tampa, Florida

WOCN Society 39th Annual Conference

June 9-13, 2007

Salt Lake City, Utah

hollisterwoundcare

An alliance of Hollister Incorporated and Laboratoires URGO

Hollister Wound Care
Libertyville, Illinois 60048
1.800.323.4060

Distributed in Canada by
Hollister Limited
95 Mary Street
Aurora, Ontario L4G 1G3
1.800.263.7400

www.hollisterwoundcare.com

FINANCIAL ASSISTANCE/DISCLOSURE

The support of Hollister Incorporated for this clinical presentation is gratefully acknowledged.

907978-607