

Case Studies that display positive outcomes with advanced wound care products in the Hospice population

STATEMENT OF THE PROBLEM

Nearly one-third of all the hospice patients in the United States, approximately 300,000 people, have wounds. Patients with a terminal illness are at a greater risk of compromised skin integrity because their nutritional status and oxygen perfusion are often poor, they have limited mobility, and many are of advanced age. Our focus regarding skin care is to promote healthy skin and provide care to prevent skin breakdown where possible. When a wound is present, our goal may be to contain drainage and reduce odor. Hospice care is directed at dignity and comfort measures, not necessarily wound closure, at the end of life. Hospice encourages a person and their families or significant others to go through the stages of dying: denial, anger, bargaining, depression and finally acceptance.

RATIONALE

When alkaline soap is used in cleansing, the cell layers of the stratum corneum are diminished both in thickness and number. The lipid coating is lost. The skin's ability to retain moisture is also challenged. Traditional bathing products contain surfactants that can dry the skin, and actually strip the natural acid mantle protective layer. The hospice patient often lacks the ability to take in or process the nutrition that helps to maintain/repair the epidermal and dermal layers of skin.

METHODOLOGY

Caregivers, including licensed nurses, nursing assistants as well as patients and their families were instructed in the use of the cleansers and also the two advanced skin products. When baths or cleansing was needed, phospholipid containing cleansers (with or without antimicrobial properties) was used. The phospholipids, as opposed to surfactants, have lipid sparing properties. After each bath or cleansing episode, a cream made from olives and amino acids was used as the general moisturizer. A second ointment that contains additional ingredients, dimethicone and other medical grade silicones that help to prevent TEWL, was applied. This 2 layer application was done at least BID. The skin care system was chosen based on the ability to deliver nutrients and antioxidants to the skin on a topical level. Skin tears and other minor wounds were dressed with silver powder[^] and a silicone faced foam dressing⁺.

PATIENT STUDY ONE

Background

WH was a 73 year old Caucasian male with a terminal diagnosis of ALS. He has a history of HTN, edema, recurrent urinary tract infections. For the past 4 years he has had unresolved bilateral lower extremity skin problems, including multiple skin tears with subsequent infection. His skin appeared very thin and fragile. Treatment included cortisone ointment, mupirocin, gentamycin, Cipro, Keflex with no resolution of the problem. His wife was managing his skin tears with Bactroban and Telfa.

Presentation on Admission

WH was admitted to our hospice program on 2/21/07. He had generalized plus 4 edema to both of her lower extremities. Because of allergies, he was treated with several different antibiotics and prednisone to treat the cellulitis. He presented with multiple bullae, areas of denuded skin, and several skin tears. He has had a chronic skin problem on his lower legs for four years. His wife expressed sadness regarding his skin condition and the suffering that had come with it. Under hospice care, we began using the advanced skin care products* to his legs, arms, back, and chest. The skin tears were dressed with a silicone faced foam⁺, after cleansing with wound cleanser. He remained in our care until 6/01/07 when he expired at home. Once his skin was intact, he did not require further systemic antibiotics or prednisone. His wife expressed regret that they had not known of these products years before.



PATIENT STUDY TWO

Background

SK was an 80 year old Hawaiian man with a terminal diagnosis of biliary cancer. He had a history of HTN, CAD, DM-II, and dementia. All the "walking" areas in his home were covered with layers of newspaper because the weeping edema was so extensive. Both lower extremities were affected.

Presentation on Admission

SK was admitted to our hospice program on 12/31/2005. Prior to admission to Hospice, his medications included Lasix, KCL, insulin (sliding scale), and antihypertensive drugs. He presented with multiple bullae and denuded areas on BLE. He was extremely receptive to the education regarding etiology of the third spaced fluid and compliant with elevating his legs while in bed. On 1/4/06 his son began cleansing his legs with an antimicrobial spray* and applying the advanced skin care cream*. Additionally, any areas of skin breakdown were dressed with an advanced skin care cream containing zinc oxide*. Within six days, his legs showed notable improvement, and the open areas were decreased by 50%. By week two, his skin issues were almost completely resolved. It was noted that his skin was totally intact within another 30 days. Throughout his last days, SK's caregiver continued to use the advanced care products and his skin remained intact until his death on 6/28/06.

PATIENT STUDY THREE

Background

CC was a 67 year old Hispanic woman with the terminal diagnosis of hepatoma, the most common type of primary liver cancer. She had a history of psoriasis, which is a hyperproliferation of epidermal keratinocytes combined with the inflammation of the epidermis and dermis, for the past 25 years.

Presentation on Admission

CC was admitted to our home hospice program on 10/4/05. Her symptoms included a general weight loss and wasting. She had erythematous plaques covered with silvery scales on most of her back, left elbow and the anterior surface of both of her legs. She also had arthritic pain due to her severe psoriasis, a condition called Psoriatic Arthritis. She had been treated with various topical treatments, including cortisone, over the years. On admission, her husband began to use the cleansing lotion* in place of the soap they had been using, and applying the advanced skin care cream*,

followed by a second layer of an advanced skin care cream containing dimethicone* to her skin at least two times daily. At the end of October, her husband said that none of the previously used ointments or creams had made such a significant difference in her psoriasis as these products had made. At this time her skin was smooth and soft, without areas of plaque. Her appetite, which was poor on admission, continued to decline until 11/4 when she began subsisting on sips of orange juice and water. CC's husband continued to nourish her skin. She expired on 12/20/05, having not eaten for 46 days. Her skin was intact until the day she died.

PATIENT STUDY FOUR

Background

MRA was a 94 year old Filipino man with a terminal diagnosis of End Stage Dementia. He had dysphagia, with chronic aspiration pneumonia and a gastrostomy (PEG) tube. He also has a history of HTN and atrial fibrillation.

Presentation on Admission

MRA was admitted to our hospice program on 7/27/2007 following hospitalization with an episode of aspiration pneumonia. He had a classic butterfly shaped pressure ulcer on the sacrum and buttocks, with multiple stages of depth and slough. On admission, the entire perineal area was denuded due to fecal incontinence since admission to our program. The diarrhea was managed with Imodium per G tube after each unformed stool. The whole area was cleansed with an advanced skin care cleanser*, and creams*, including a zinc oxide based barrier ointment*, were applied at least twice a day and after each incontinent episode. MRA was placed on a silk air overlay mattress. Initially, the periwound area was so damaged that it was impossible to secure a physical dressing. Compliance issues with the wound care treatment led us to focus on skin care and the wound developed an area of eschar. In less than two weeks, the butterfly shaped sacral ulcer was reduced by about 30% and the perineal and buttocks area much less inflamed.



PATIENT STUDY FIVE

Background

ROF is a 66 year old Caucasian male with a terminal diagnosis of end stage Cardiomyopathy. His hospice related diagnoses are CHF, atrial fibrillation, ejection fraction of 20%, COPD, and LE edema. His non-hospice diagnoses include ETOH dependency, cirrhosis, kidney disease, PVD, DM and HTN. He suffered an MI in 1992 with bypass grafting and a subsequent myocardial infarct in 1999. He has had severe pruritus for two years. Treatment with topical and oral steroids by his primary physician and a dermatologist lead to a fluid weight gain of 40 pounds. The cause of his pruritus was never determined.

Presentation on Admission

ROF was admitted to our hospice program on August 3, 2007. His skin appeared very red and "angry". He had unusual macular markings on his abdomen, chest and back. Several areas, especially his arms, showed scratch lines and were bleeding. We began using advanced skin products* to arms, legs, back, abdomen, and chest. We used a foam cleanser rather than soap to all areas. Advanced skin care products were applied BID and throughout the day whenever he experienced itching. Just two weeks after he was admitted to our program and the skin care regime begun, there was marked improvement. He did, however, continue to complain of itching and the skin still appeared reddened. He continued to use the skin care regime and on August 30, 2007 his skin was completely intact and he was experiencing no pruritus. Both he and his wife were very happy that he could now rest because the pruritus was gone and that his skin problem had resolved. They will continue this same skin care regime throughout the rest of his hospice course.



RESULTS AND CONCLUSIONS

In all case studies, the skin that was compromised on admission to our hospice program, became intact and remained intact through the last several months of life. This greatly enhanced the quality of life for our patients and increased their comfort.

REFERENCES

1. Bryant RA, Nix DP. Acute and Chronic Wounds 3rd Edition - Current Management Concepts. 2007.
2. Edwards J. Perineal Skin Care In The Incontinent Patient With Nourishing Olivamine* Containing Treatment Cream. Poster presented at the Symposium on Advanced Wound Care. San Diego, CA. April 2005.
3. Fleck CA. The Dawn of Advanced Skin Care. ECPN. September/October 2004.
4. Langemo DK, Brown G. Skin Fails Too: Acute, Chronic, and End-Stage Skin Failure. Advances in Skin & Wound Care. 2006;19(4):206-211.
5. Tippet AW. Wounds at the End of Life. Wounds 2005(17): 91-98.

*Remedy Skin Care from Medline Industries, Inc. Remedy is a registered trademark of Medline Industries, Inc. Mundelein, IL

⁺Remedy 4 in 1 Cleansing Lotion, Remedy Skin Repair Cream, Remedy Calazime Protectant Paste, and Remedy Nutrashield from Medline Industries, Inc. Mundelein, IL

⁺GentleHeal is a registered trademark of Ossur hf. Gentleheal from Medline Industries, Inc. Mundelein, IL

[^]Arglaes is a registered trademark of Giltech, Ltd. Arglaes Powder from Medline Industries, Inc. Mundelein, IL