

# **Treatment of Multiple Stage II Ulcers in the Sacral-Coccygeal Region of a Fecally-Incontinent Patient**

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**Patricia Robertson Newlin, MSN, RN, CETN**

**Clinical Nurse Specialist**

**Alegent Health**

**Bergen Mercy Medical Center**

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**Alegent Health, Bergen Mercy Medical Center, Omaha, Nebraska**

## Abstract

Multiple Stage II ulcers covering a 12 cm by 8 cm area of the sacral-coccygeal region were noted in a 74-year-old male patient admitted following surgical repair of a supracondyle fracture of the right femur. The patient had been non-ambulatory for several years following a cerebral vascular accident with resultant left hemiplegia. Medical history was also significant for obesity, congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), and deep vein thrombosis. The patient could not be positioned on either side due to his fracture and hemiplegia. Frequent fecal incontinence and shearing contributed to the development of the ulcers. A barrier film\* was applied to the patient's perianal skin and hydrocolloid dressings\*\* were placed over the ulcerated areas. A perineal cleanser was used after each episode of fecal incontinence. The hydrocolloid dressings remained in place for five days and the barrier film was applied once daily. The patient was transferred, via a slide board, to a chair at bedside BID. On the fifth post-op day, the ulcerated areas were re-epithelialized and use of the barrier film was discontinued. The hydrocolloid dressings were reapplied for continued skin protection. Photographs are presented to document the healing of the ulcerated areas. The combination of the barrier film and hydrocolloid dressings provided an excellent environment for treatment of Stage II ulcers in a fecally-incontinent patient.

\*3M™ Cavilon™ No Sting Barrier Film, 3M Health Care, St. Paul, MN

\*\*3M™ Tegaderm™ Hydrocolloid Dressings, 3M Health Care, St. Paul, MN

## Overview

The treatment of pressure ulcers, particularly in an aged, incapacitated patient, can be further complicated by fecal incontinence. Fecal incontinence may be one of the greatest risk factors associated with the breakdown of skin tissue and onset of infection. As skin ages, its capacity to heal itself decreases as the rate of re-epithelialization declines and the dermis becomes thinner and less elastic. Normal skin turgor decreases and skin becomes drier with more visible crevices in which bacteria can grow. Chronic fecal incontinence with its combination of moisture, friction, bacteria and enzymatic activity, sets up a vicious cycle that can lead to breakdown of aging skin tissue.<sup>1</sup>

## Case history

A 74-year-old male patient was admitted to the unit following surgical repair of a supracondyle fracture of the right femur. The fracture was thought to have occurred four days prior to hospitalization during a pivot transfer while bearing weight on his right leg. The patient was a resident of a county long-term care facility. The patient had been non-ambulatory for several years following a cerebral vascular accident with resultant left hemiplegia. Based on a Braden Scale evaluation<sup>2</sup> upon admission, this patient was at high risk for development of pressure ulcers (Table 1). The medical history was also significant for obesity, congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), and deep vein thrombosis. The patient could not be positioned on either side due to his fracture and hemiplegia. The head of the bed was elevated due to respiratory distress resulting from CHF and COPD. Frequent fecal incontinence and shearing contributed to the development of the ulcers. Multiple Stage II ulcers covering a 12 cm by 8 cm area of the sacral-coccygeal region were noted. Figure 1 shows the initial appearance of the sacral-coccygeal area with scattered satellite ulcers. In addition to defined ulcers, there were multiple areas of erythema due to incontinence dermatitis.

## Treatment plan

The patient was placed on a low air loss mattress overlay. A perineal cleanser was used after each episode of fecal incontinence. 3M™ Cavilon™ No Sting Barrier Film was applied to the patient's perianal skin, covering the Stage II ulcers and the scattered satellite ulcers, with coverage of the erythematous areas as well. 3M™ Tegaderm™ Hydrocolloid dressings were placed over the primary ulcerated areas.



**Figure 1** shows the initial appearance of the sacral-coccygeal area with Stage II and scattered satellite ulcers.

**Table 1.** Braden Risk Assessment Scores<sup>†</sup>

Assessment parameter	Assessment at admission	Assessment at 72-hours post admission
Sensory perception	3	3
Moisture	1	2
Activity	1	2
Mobility	2	3
Nutrition	2	2
Friction and shear	1	1
Total <sup>††</sup>	10	13

<sup>†</sup> Scale is generally rated from 1 (worst) to 4 (best).

<sup>††</sup> Patients with a total score of 16 or less are considered to be at risk of developing pressure ulcers (15 or 16 = low risk, 13 or 14 = moderate risk, 12 or less = high risk).

Dressings remained in place for five days (Figure 2) and the barrier film was renewed daily. During that time, the patient was transferred, via a slide board, to a chair at bedside twice daily. He continued to have fecal incontinence.

## Results

On the fifth post operative day, the ulcerated areas were re-epithelialized and areas of erythema had resolved (Figure 3). Use of the 3M™ Cavilon™ No Sting Barrier Film was discontinued; 3M™ Tegaderm™ Hydrocolloid dressings were replaced for continued skin protection. The patient was transferred back to the long-term care facility where he resided.

## Conclusions

The photographs document the reduction in the severity and size of the area covered by the ulcers. The ulcers were significantly improved after five days of treatment. 3M™ Cavilon™ No Sting Barrier Film was applied daily on this case study, however, in a recent study, a three-day reapplication schedule was determined to be as clinically effective. The combination of 3M™ Cavilon™ No Sting Barrier Film and 3M™ Tegaderm™ Hydrocolloid dressing provided an excellent environment for treatment of Stage II ulcers and incontinence dermatitis in a fecally-incontinent patient.



**Figure 2** shows the 3M™ Tegaderm™ Hydrocolloid dressings after five days of wear.

## References

- <sup>1</sup> Jeter JF, Lutz J. Skin care in the frail, elderly, dependent, incontinent patient. **Advances in Wound Care.** January/February 1996, Vol. 9, pp. 29-34.
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- <sup>3</sup> Kennedy, KL et al. Cost effectiveness evaluation of a new alcohol-free, film-forming incontinence skin protectant. Abstract/Poster 28<sup>th</sup> Annual Conference, Wound, Ostomy and Continence Nurse Society. June 15-19, 1996.

## Biography

Patricia Robertson Newlin received her BSN from the University of Nebraska School of Nursing in 1962 and her MSN from the University of Nebraska Graduate College in 1976. She completed the Emory University ET Nursing Education Program and was certified as an Enterostomal Therapy Nurse in 1989 with recertification in 1994. Ms. Newlin has practiced in acute, long-term and home care settings as a Clinical Nurse Specialist with Alegent Health, Bergan Mercy Medical Center since 1976.



**Figure 3** shows the appearance of the sacral-coccygeal area after re-epithelialization and prior to re-application of 3M™ Tegaderm™ Hydrocolloid dressings for continued skin protection.



**Medical Division  
3M Health Care**

3M Center, Building 275-4W-02  
St. Paul, MN 55144-1000  
USA  
1-800-228-3957  
[www.3M.com/healthcare](http://www.3M.com/healthcare)

**Medical Division  
3M Canada**

Post Office Box 5757  
London, Ontario N6A 4T1  
Canada  
1-800-563-2921

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