Use of Barrier-Impregnated Cloths to Treat Severe Incontinence-Associated Dermatitis: A Case Study

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INTRODUCTION

Incontinence is a common condition. One study demonstrated a prevalence rate of nearly 20% among hospital inpatients and that fecal incontinence was more common than urinary incontinence.1 When urine or fecal incontinence contaminate skin, the resulting inflammation is known as incontinence-associated dermatitis (IAD).1-3 IAD increases a patient’s risk of pressure ulcer development, although the etiologies of the 2 conditions are quite different.2,3 Pressure ulcers develop as a result of force exerted over a bony prominence; in contrast, IAD is a skin inflammation that results from contact with an irritant (e.g., urine or feces).4 Factors that are significantly correlated with the development of IAD include incontinence, poor skin condition, poor skin oxygenation, malnutrition, and compromised mobility.2

IAD manifests initially as erythema, edema, and occasionally bullae or denudation of skin layers and to secondary infection, usually fungal in nature.1 Patients may experience general discomfort, itching, burning, or pain in the affected area, and patients are at higher risk for developing pressure ulcers.5 In addition, the hospital had used aggressive incontinence-management methods, including the following:

- Use of knee flexion if the head of the bed was elevated >30º
- Use of a fecal management system (FMS)
- Application of barrier creams every 4 hours and as needed
- Continuous skin assessment with care provided
- Cleansing of the affected area every 4 hours or more frequently
- Turning every 2 hours
- Offloading of the heels
- Use of absorbent pads
- Increased fluid intake
- Increased protein intake
- Increased caloric intake
- Use of suction if indicated
- Use of the Braden Scale and the Norton Scale (see Table 1)
- Use of the Braden Assessment scale

However, despite these measures, the patient’s skin was constantly exposed to fecal contamination through the use of this product into its regimen for patients with severe IAD refractory to our standard protocol. The cloths are kept at the patients’ bedsides and are available as long as is clinically necessary.

RESULTS

Use of barrier-imregnated cloths was far more effective than the standard skin care regimen at resolving severe IAD in a high-risk patient with serious fecal incontinence–related moisture issues. On the basis of the results of this case study, the hospital has incorporated the use of this product into its regimen for patients with severe IAD refractory to our standard protocol. The cloths are kept at the patients’ bedsides and are available as long as is clinically necessary.

CLINICAL IMPLICATIONS

- The product saved nursing time with its one-step application
- Skin regeneration occurred in a timely fashion
- Cost savings were realized because of the elimination of multiple creams and ointments as well as various linens and disposable washcloths
- Patient pain levels were diminished when compared with the original incontinence protocol

METHODS

- Use of 3% dimethicone-impregnated cloths was substituted for other products to test the effectiveness of the cloths.
- To ensure staff compliance, in-service educational sessions were provided by the supplier once weekly for every shift.
- Use of tube barrier cream was discontinued.

REFERENCES