Clinical Problems Targeted in This Study

Incontinence-associated dermatitis (IAD) is a skin injury that develops when the skin is exposed repeatedly to urine or fecal matter. In a study of acute care patients, the overall prevalence of incontinence was 19.7%, and of the patients suffering from incontinence, 42.5% experienced skin injury. The development of IAD increases patient morbidity, hospital length of stay, and risk of infection. In addition, patients afflicted with IAD have a heightened risk of developing pressure ulcers (PUs). The Institute for Healthcare Improvement (IHI) recommends pre-moistened, disposable barrier washcloths be available at the patient’s bedside to help prevent IAD.

Incontinence-associated dermatitis poses a serious risk to incontinent patients, and appropriate identification and treatment of IAD are a vital aspect to patient care. Efforts for prevention of IAD in high-risk patients include the following:

1. Identify and treat the cause of incontinence.
2. Frequently assess skin integrity and color.
3. Cleanse skin gently with slightly acidic products (similar to 5.5 pH of normal skin).
4. Use emollients and skin agents to soften the skin.
5. Position high-risk patients semi-prone for 30 minutes 2 or 3 times a day to expose the skin to air.
6. Apply a protectant to the skin.

Implementation of an effective skin care program can decrease the prevalence of IAD. Despite the availability of 3% dimethicone-impregnated all-in-one disposable washcloths at St. Thomas Elgin General Hospital (STEGH), a community hospital, STEGH underutilized the product. An IAD point-prevalence study was conducted at STEGH in September 2009 to evaluate the prevalence of IAD within the facility and examine the factors related to underutilization of barrier cloths.

Goals and Objectives

A 3-pronged IAD Prevention Strategy consisting of 1 part education, 2 parts workflow was implemented to reduce the prevalence of IAD in incontinent patients in an acute care setting.

Methods

An IAD prevalence study was performed before implementation of the IAD Prevention Strategy to establish a baseline of IAD prevalence and to analyze potential factors contributing to the development of IAD. An IAD intervention tool (IADIT) provided a guideline for the identification of IAD in patients (Figure 1). Qualitative findings from the pre-implementation period regarding product availability and accessibility were utilized for development of the IAD Prevention Strategy.

The 3-pronged IAD Prevention Strategy consisted of:

1. Transition from 3-pack to 8-pack Shield Barrier cream cloths
2. Installation of a bedside receptacle for multiple 8-packs of Shield Barrier cream cloths
3. Comprehensive staff education on appropriate use of skin care products

The Nursing inservice and education took place in September 2009 and October 2009 to communicate changes in IAD prevention. Follow-up IAD prevalence studies were conducted 1 month and 10 months after implementation of the IAD Prevention Strategy. The numbers of incontinent patients over the prevalence data collection period were as follows:

- Pre-implementation (September 17, 21, 25, 2009): n = 38
- 1 month post-implementation (January 7, 11, 15, 2010): n = 54
- 10 months post-implementation (October 6, 12, 19, 2010): n = 50

References

Clinical Problems in September 2009 to evaluate the prevalence of IAD at a community hospital, STEGH underutilized the product. The Institute for Incontinence prevention practices in place to decrease the prevalence of IAD. Despite the availability of the IAD Prevention Strategy to promote a positive patient experience. Nursing inservice and education took place in October 6, 12, 19, 2010: n = 50 (September 17, 21, 25, 2009): n = 38.

Methods

The 3-pronged IAD Prevention Strategy consisted of:

1. Identification and treatment of the cause of incontinence
2. Use of an all-in-one product, such as barrier washcloths that include cleansing, moisturizing, and protectant
3. Consider use of external catheter or fecal collector
4. Consider use of ointment or liquid skin barrier to prevent caking
5. Consider applying a zinc oxide-based product for weepy or bleeding areas
6. Consider use of external catheter or fecal collector
7. Consider use of ointment or liquid skin barrier to prevent caking
8. Consider use of external catheter or fecal collector
9. Consider use of ointment or liquid skin barrier to prevent caking
10. Consider use of external catheter or fecal collector

Results

The 3-pronged IAD Prevention Strategy resulted in a 53% decrease in the prevalence of IAD over a 10-month period (Figure 2).

- Baseline 1 month post-implementation
  - IAD prevalence 47% 37% 21% decrease
- Baseline 10 months post-implementation
  - IAD prevalence 47% 22% 53% decrease

Conclusion

Prevention of IAD requires multiple efforts at the patient bedside, including appropriate identification of at-risk skin, adherence to incontinence cleanup regimens, comprehensive staff education, appropriate skin care regimens, and convenient product location.

Clinical Practice Implications

IAD poses a serious risk to incontinent patients, and identification and treatment of IAD are a vital aspect to patient care. The best methods for prevention of IAD in high-risk patients are:

1. Identify and treat the cause of incontinence
2. Frequently assess skin integrity and color
3. Cleanse skin gently with slightly acidic products (similar to 5.5 pH of normal skin)
4. Use emollients and skin agents to soften the skin
5. Apply topical agents to reduce skin sensation and the ability to sense temperature compared to skin not exposed
6. Provide a private setting for hygienic cleansing
7. Provide a private setting for hygienic cleansing
8. Provide a private setting for hygienic cleansing
9. Provide a private setting for hygienic cleansing
10. Provide a private setting for hygienic cleansing

The IHI recommends pre-moistened, disposable barrier washcloths that include cleansing, emollient, deodorizing, and skin protectant solutions be provided at the bedside to prevent IAD. Prevention of IAD may improve the patient’s clinical experience and minimize the risks, complications, and costs associated with IAD. Use of an all-in-one product, such as the washcloth used in this study, provides all of the skin products recommended by the IHI in one disposable product for IAD prevention in incontinent patients.