

Multi-Approach Project for Improving the Care of Incontinence-Associated Dermatitis

I-Chun Chen, RN, BSN, Department of Nursing, National Taiwan University Hospital, Taipei, Taiwan, ROC.
Shiao-Pei Wang, HN, Department of Nursing, National Taiwan University Hospital, Taipei, Taiwan, ROC.

Introduction

Incontinence is a common problem for intensive care patients. Incontinence-associated dermatitis (IAD) is a kind of inflammatory response after exposure to the urine and fecal secretion. A preliminary investigation was carried out in a 10-bed emergency ICU during May and June in 2014 and showed the incidence rate of IAD was 46.9% (15/32). Therefore, IAD was an important and emergent problem and need to be resolved through evidence-based improvement project.

Methods

IAD care improvement project:

According to the causes of IAD, members of this project developed IAD care standard refer evidence literature, include high risk assessment within 24 hours after admission, reminder card marked on the head of bed for IAD high-risk patients, and provide skin care in accordance with IAD grading. In addition, probiotics were prescribed to IAD high-risk patients for improving stool properties if they have no white blood count (WBC) lower than 500, not immune compromised or fasting.

Project implementation:

After the development of IAD care standard, four times in-service education were held to make sure all staff of this unit attended at least one disseminating course. During the course, the IAD introduction and content of IAD care improvement project was disseminated to nursing staff. IAD assessment tool was also incorporated into new staff training program. The outcomes of this project were audited by team members of project monthly.

Results

The incidence of IAD was 27.9% (31/111), improved by 40.5% [(46.9%-27.9%)/46.9%]. Compared with patients without IAD, patients with IAD stayed in ICU for longer period of time (15.8 days ± 12.6 days vs. 5.4 days ± 6.9 days, $p < 0.001$), higher scores of IAD assessments on admission (4.3 ± 2.1 vs. 3.3 ± 1.7, $p = 0.008$) and higher scores of IAD assessments one week after admission (7.0 ± 2.8 vs. 4.5 ± 2.1, $p < 0.001$).

Conclusion

IAD improvement project could effectively lower the incidence of IAD; the incidence of IAD was associated with scores of IAD assessments on admission and one week after admission. It was suggested that the scores of IAD assessments and re-assessments might be used for predicting the occurrence of IAD.



Demonstration of reminder cards

Grading	Probiotics	Skin Care		
High-risk		Cleaning → Moisture barrier → Drying		
Pink				
Red		Cleaning → Moisture barrier → Drying → Consulting with nurses		
Skin loss				
Rash		Drying → Use of therapeutic ointment or cream → Culture		

IAD grading and intervention