Preventing Device-Related Pressure Ulcers in the STICU

Foley Catheters

June 15, 2016
Overview

S: Development of pressure ulcers is an ongoing problem for patients in the critical care inpatient setting. While most wounds develop over boney prominences, pressure ulcers can also develop from the use of invasive devices.

B: Since the beginning of Fiscal Year 2015-2016, the STICU has seen an increase in device-related pressure ulcers – including those related to the use of Foley catheters. Pressure ulcers acquired through the use of invasive devices can be difficult to prevent, assess, and treat. While diligent assessment of all skin area is paramount, the implementation of simple device-related interventions may help to reduce pressure ulcer development in some patients.

A: In all non-ambulatory patients, the Foley catheter needs to be repositioned on a regular basis to help assess for and prevent skin breakdown. While this is true for all patients unable to walk, repositioning becomes more important when a patient is faced with additional factors that contribute to skin breakdown (i.e. vasopressors, edema, weeping skin).

R: Below you will find the recommended interventions for all non-ambulatory patients to help reduce the development of Foley catheter related pressure ulcers.
Literature Review

- Occurrences of pressure ulcers in the ICU setting have been shown to range from 10% to 41%, with cost estimates between $5,000 and $50,000 for one stage III or IV (Cooper, 2013).
- Overall estimated costs for treating pressure ulcers is $11 billion/year (Pittman, Beeson, Kitterman, Lancaster, Shelly 2015).
- Medical device related (MDR) pressure ulcer can be defined as “a localized injury to the skin and/or underlying tissue including mucous membranes, as a result of pressure, with a history of an external medical device as the location of the ulcer, and mirrors the shape of the device” (Pittman, Beeson, Kitterman, Lancaster, Shelly 2015).
- MDR pressure ulcer prevention can be very difficult in the critically ill population. Multiple factors contribute to this including, but not limited to, the need for numerous devices, sedation, decreased mobility, inadequate nutrition, and hemodynamic instability (Black et al. 2010; Pittman, Beeson, Kitterman, Lancaster, Shelly 2015).
- When implementing interventions to prevent MDR pressure ulcers, early recognition of risk factors is key, as is recurring evaluation of the skin and repositioning the device in order to relieve pressure (Black et al. 2015).
Staff Survey Results
(Pre-intervention practice change)

**Question 1:** In your non-ambulatory patients, how often do you assess for skin breakdown in the genital area?

- At least once a shift: 21
- When I think about it: 7
- Never: 0

**Question 2:** In your non-ambulatory patients, do you routinely reposition your patient's foley catheter?

- Yes: 10
- No: 5
- Sometimes: 13

**Question 3:** Do you feel we have sufficient interventions in place to prevent foley catheter related skin breakdown in the non-ambulatory patient population?

- Yes: 6
- No: 13
- I don't know: 9
**Interventions**

1. Reposition the Foley catheter every 2 hours, or with patient repositioning.
   
a. Physically rotate the catheter tubing from one side to the other. Be sure to rotate at the point of insertion rather than simply moving the drainage bag from side to side. This will redistribute the pressure caused by the tubing on the body.
Interventions

b. Consider using a second stat-lock or Velcro securing device, one on each leg, to facilitate stabilization.

c. When placing stat-locks, be sure to place high enough on patient’s leg to ensure no tension is on the tubing.
Interventions

2. Assess patient’s skin around the Foley catheter at least once a shift. More frequent assessments may be needed if contributing factors are present. If any breakdown is noted, please enter into EPIC and seek a Wound Care Team consult.

BPA will fire when pressure injury wound is entered in EPIC

Be sure to select “Per protocol: Co-sign required” when completing the order
Desired Outcomes

- Decrease in Foley-related pressure ulcers
- Improved perineal skin integrity in critically ill patients
- Increase in staff confidence in device related pressure ulcer prevention
- Overall improvement in unit acquired pressure ulcer rates
References


