

Stryker Sponsored Learning:

Incontinence-associated Dermatitis and Pressure Injuries

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Joan Junkin's transition into wound specialization came in 1992 in a research analyst role for the AHCPR Pressure Ulcer Treatment Guideline panel. After becoming a clinical nurse specialist and board-certified wound, ostomy and continence nurse (CWOCN), she spent 10 years building the skin and wound program at a 500-bed acute care facility. For the past 10 years, she has provided wound seminars in all 50 states and four Canadian provinces. She also provides wound consulting for a hospice program and long-term care facilities in Nebraska.

Prevalence of Incontinence-associated Dermatitis (IAD)

Based on the latest combined Canadian and U.S. data, 18% of patients in all levels of care were reported to have incontinence.¹ In long-term care, 8.4% had IAD; in acute care 19% did. Risk factors for skin damage include fecal management systems, higher body weight, diminished mobility, additional linen layers, longer length of stay and lower Braden Scale scores.

How can we do better?

- Keep skin dry, acidic and protected from excess moisture, friction and pressure.
- Follow research-informed guidance from expert organizations.

Moisture

Hazards of moist skin include decreased tensile strength, which can lead to skin tears and fissures, an increased friction coefficient, which can lead to abrasions and deep tissue injuries, and loss of acid mantle protection (alkaline pH), which can lead to fungal and bacterial colonization and infection.

Consistency is Key

While IAD research cites various skin care protocols, findings agree that consistency in care is essential.

Prevention

Avoid indwelling catheters whenever possible to reduce the chance of catheter-associated urinary tract infection. Instead, consider using non-invasive devices. Male condom catheters are available but must be sized correctly; if not used correctly, erosion may

occur. External female urinary collection devices are now available. These devices have very soft cores that contour between labia and are connected to continuous wall suction to collect urine. A silicone, non-adhesive suprapubic pad secures the device. Research suggests clinicians should avoid occlusive containment products (plastic pads/briefs) and that all-in-one incontinence products promote compliance and show a decrease in IAD rates and severity. Non-rinse cleansers are ideal because they reduce the steps involved in care and limit the risk of friction during skin care. They should be pH balanced, unlike alkaline soaps. Clinicians are encouraged to gently cleanse skin, not scrub or rub the skin.

Friction

Friction must be avoided on delicate or moist skin. Reusable cloth washcloths increase friction; disposable cloths are a much better option because they do not have exfoliating nubs. According to the Institute for Healthcare Improvement, all-in-one barrier cloths are the best option as they are very soft, and they leave a consistent, breathable dimethicone barrier to protect high-risk skin.

Best Practice Recommendations for Critical Care

According to Nurses Specialized in Wound, Ostomy and Continence Canada (NSWOCC), goals for all patients in critical care (e.g., for COVID-19) must include:

- preventing moisture-associated skin damage through use of a structured skin-care program
- preventing pressure injury through avoiding use of alkaline soaps and cleansers for incontinence cleansing and using barrier products to protect from excessive moisture

IAD and Pressure Injury Connection

Pressure injury (PI) is about twice as likely as IAD. The rate of IAD and health-care-acquired pressure injuries decrease when all-in-one incontinence barrier cream cloths are used (Figure 1). When skin is kept clean, dry and protected, research shows not only a lower prevalence of IAD but also of PI. In one long-term care facility, patients being treated with all-in-one barrier cream cloths for incontinence care saw a 70% reduction in IAD and a 23.6% reduction in sacral pressure injuries.² In one acute care setting, a baseline prevalence of 39% was reported. Of those with IAD, 67% went on to develop of pressure injury. After 3% dimethicone cloths were implemented for incontinence clean up, IAD levels dropped to zero.³



Figure 1. Sage Comfort Shield all-in-one barrier cream cloths with 3% dimethicone gently cleanse and protect the skin from IAD.

Differential Diagnosis: IAD vs. PI

Location: if on a bony prominence or under a device, it is more likely a pressure injury; if on a fleshy prominence (i.e. buttocks), it is more likely IAD or abrasion

Shape/depth: if it conforms to the shape of the underlying bone or device, or if it is full-thickness, it is more likely a pressure injury

Colour: if deep purple/indurated, it is more likely a deep tissue pressure injury; if faded purple, it may be resolving inflammation

References

1. Kayser SA, Phipps L, VanGilder CA, Lachenbruch C. Examining prevalence and risk factors of incontinence-associated dermatitis using the International Pressure Ulcer Prevalence Survey. *J Wound Ostomy Continence Nurse.* 2019;46(4):285–290.
2. Fortunat K. Consistent, Simplified Skin Care Processes Are Key to Reduction of Incontinence Associated Dermatitis and Sacral Pressure Ulcers in Long Term Care. Poster presented at Canadian Association of Wound Care (CAWC) Conference, November 2014.
3. Morrow H. Protecting Patients Skin With the Reduction of Incontinence-Associated Dermatitis. Poster presented at Canadian Association of Wound Care (CAWC) Conference, November 2011.
4. Bergstrom N, Horn SD, Rapp MP, Stern A, Barrett R, Watkiss M. Turning for ulcer reduction: A multisite randomized clinical trial in nursing homes. *J Am Geriatr Soc.* 2013;61(10):1705–1713.

Pressure Injury Prevention Basics

- Keep skin clean, dry and protected (from over-drying)
- Ensure good nutrition (especially protein and hydration), exercise (e.g., chair exercise, stretch bands) and endorphins (e.g., laughter, music therapy, pet therapy, massage)
- Follow facility protocol, but most stable, high-risk people tolerate repositioning every four hours and do not get more pressure injuries than those turned every two hours⁴
 - Use repositioning devices (e.g., wedges) rather than pillows when repositioning to save time, improve patient compliance, avoid patient and clinician injury and lower pressure injury incidence (see Figure 2)



Figure 2. Sage Prevalon AirTAP air-assisted system with 30-degree wedges, enables staff to turn and position patients safely and easily, while preventing sacral pressure injuries.

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