Incontinence-associated dermatitis: Management update

Timely assessment and prevention improve patient outcomes.

By Kathleen Francis, DNP, FNP-BC, CWOCN

When your patient's skin is repeatedly exposed to moisture from urine and feces, he or she is at risk for incontinence-associated dermatitis (IAD), which can result in discomfort, loss of independence, disruption in daily activities, embarrassment, and a reduced quality of life.

IAD affects the perianal area, perineum, buttocks, and thighs; it's most severe when the patient experiences frequent episodes of incontinence and exposure to liquid fecal effluent. (See *How skin functions: A refresher.*) Patients with IAD frequently report pain, burning, itching, and tingling in the affected areas.

IAD is common, but prevalence varies depending on the healthcare setting, with rates ranging between 3.5% and 42%. And as hospitals reduce the number of indwelling catheter days to prevent catheter-associated urinary tract infections, IAD incidence rates in acute care settings have risen.

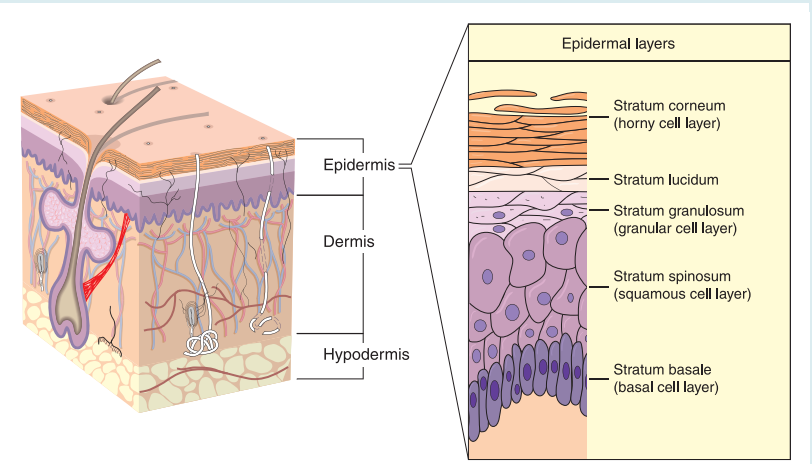
The National Pressure Ulcer Advisory Panel guidelines suggest that moisture-associated skin damage, such as IAD, can increase the risk of pressure injury (PI). Because PI rates are nationally reported quality indicators for nursing care, IAD assessment, prevention, and management are essential to any facility's skin care program.

How skin functions: A refresher

One of the primary functions of the skin is to act as a barrier to prevent harm and excessive fluid gain or loss. Healthy skin is resistant to various types of mechanical damage and protects against the effects of irritants, such as urine and stool.

The skin consists of two layers—the epidermis (outer layer) and the dermis (inner layer). The outermost epidermal layer, the stratum corneum, is made up of keratin-rich disk-shaped horny cells called corneocytes, connected by a rich lipid substance that forms a strong barrier.

Skin is acidic (pH of 4 to 6), which helps control bacteria on its surface. This acid mantle maintains the cohesion and barrier function of the stratum corneum. However, prolonged exposure to chemical irritants found in urine and stool can raise the skin's pH, damaging the protective acid mantle and disrupting the barrier function. When the barrier function is disturbed, the skin becomes susceptible to the enzymes in urine and stool, resulting in inflammation, erythematous, and denudation.



Assessment

Establishing the presence of incontinence is essential to identifying patients at risk for IAD. Patients may be reluctant to tell you about their incontinence if you don't ask, so your initial history and physical exam should include questions about it, including type (urinary or fecal) and frequency. Ask the patient or caregiver about toileting and bathing routines and if there have been any "accidents."

Inspect the patient's skin, including perigenital skin, noting color, turgor, moisture, temperature, and the presence or absence of skin injuries. Adequate lighting will help you see any subtle changes in skin color. (See *IAD vs PI.*) Repeat skin assessments as needed. Patients who are incontinent should be assessed more frequently because they're at increased risk for IAD.

The classic presentation of IAD is moist, reddened skin and inflammation. (See *Detecting IAD.*) You may see diffuse epithelial edema

and irregular borders with or without weeping and blistering. Satellite lesions are typically caused by secondary cutaneous candidiasis, which is associated with more severe cases of IAD. In patients with darker skin tones, redness may be more subtle and may appear as a discoloration when compared to the surrounding skin. Most patients will report a burning sensation with pain and pruritus in the area of discoloration.

Prevention

Identifying the cause of incontinence can help determine appropriate interventions to limit episodes and protect the skin. For example, the patient with functional incontinence can identify the need to void or defecate but can't physically get to the bathroom without assistance. Implementing a plan to assist the patient can limit the episodes of incontinence. For a patient who has urinary incontinence caused by neurogenic bladder from a spinal cord injury, implementing a program with clean intermittent catheterization will limit episodes of urinary incontinence and prevent nephritis. In both of these examples, placing the patient in an incontinence brief won't limit the episodes of incontinence and will expose the skin to unnecessary moisture.

IAD vs. PI

Often, sacral and buttock lesions associated with incontinence-associated dermatitis (IAD) are mistaken for pressure injuries (PIs). However, most PIs are located on or over a boney prominence. They're caused by prolonged pressure or the patient's inability to change position. If the patient is ambulatory and without sensory deficits, chances are redness on the sacrum isn't related to prolonged pressure.

Toileting

Structured toileting programs, when appropriate, can significantly reduce the patient's exposure to moisture. External devices to contain urinary or fecal incontinence, such as pouches and condom catheters, can be used based on individual patient needs. Indwelling urinary or fecal catheters should be an option of last resort because they make the patient more vulnerable to infection.

Absorbent products

Using absorbent products in combination with frequent garment changing will help keep skin dry and prevent fungal dermatitis. Absorbent incontinence products, such as pads or briefs worn by the patient and pads placed on the bed or chair, quickly wick moisture away from the skin to reduce IAD risk.

To avoid fungal dermatitis that can occur from occlusion of the perineal area in bed-bound patients in the acute care setting, body-worn briefs should be limited to ambulatory patients or those who use a wheelchair or are chair-bound. Absorbent incontinence pads allow for effective dissipation of moisture from the perineal area in bed-bound patients.

Patient preference and need also may play a role in product choice. For example, some hospitalized patients may prefer body-worn briefs to maintain their dignity. Although many absorbent products provide improved fluid handling and incorporate a breathable outer liner, the benefit of generalized use in acute care hasn't been established.

Skin care

Skin care to prevent IAD includes three steps.

1. Gently clean the skin with a soft cloth and a no-rinse cleansing product that contains surfactants to loosen irritants. Avoid products that require rinsing and drying the skin with a towel. Choose a soft cloth to limit friction damage to the area and a cleanser with a pH range consistent with the skin's acid mantle.
2. After cleaning the skin, apply moisturizer to replenish intracellular lipids and maintain the skin's moisture barrier function.
3. Apply a moisture barrier ointment to protect the skin from effluent. These ointments may contain petroleum, dimethicone, or zinc oxide.

Another option is an all-in-one soft cloth that contains a cleanser, moisturizer, and barrier. Some evidence supports the use of all-in-one products because they're easier to use and ensure all three steps are routinely implemented.

Management

In addition to prevention and skin care, other treatments include antifungal barrier ointments or powders

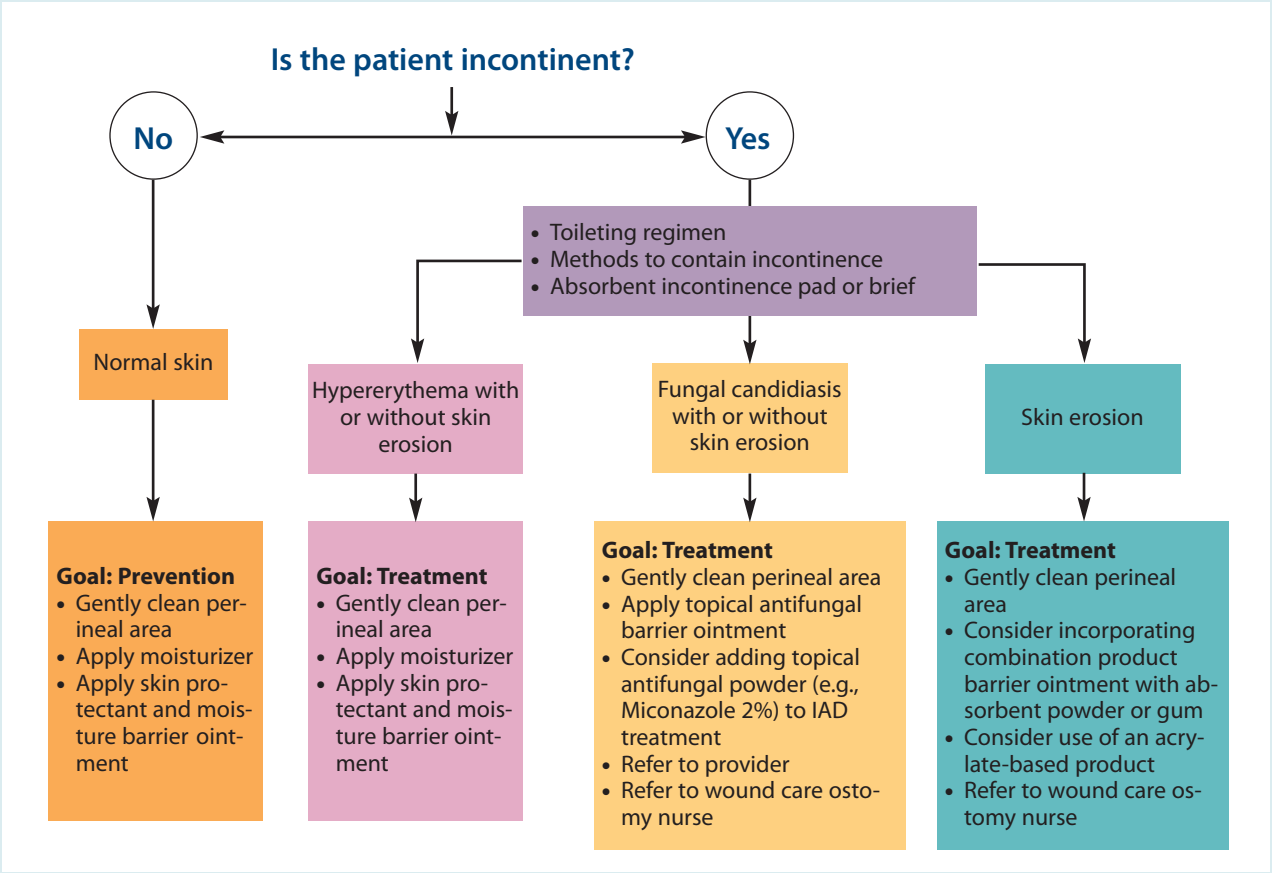
Detecting IAD

Most patients with incontinence-associated dermatitis (IAD) have red, irritated, and inflamed skin.

IAD on the back of the upper thighs. Note the irregular borders and irregularly shaped denuded skin.

IAD with intertrigo in the skin fold. Note the darkened border, which may be a sign of chronic moisture injury.

IAD topical treatment algorithm



for treating candidiasis or cutaneous fungal rash. Reserve antifungal therapies for patients with fungal dermatitis; don't use them for uncomplicated IAD.

Topical steroids and antimicrobials should not be used regularly. Topical steroids can mute the symptoms of IAD and fungal dermatitis, but they don't treat the underlying cause. Reserve their use for dermatologic skin conditions, such as atopic dermatitis. Antimicrobials, which can reduce healthy skin flora and increase the risk of dermatologic infection, are appropriate only if the patient presents with a skin infection. For severe cases of fungal incontinence dermatitis, a combination product, such as nystatin-triamcinolone, can be considered.

For complicated cases of IAD that don't respond to treatment within 2 weeks, refer the patient to a wound specialist, such as a wound ostomy continence nurse or a dermatologist. (See *IAD topical treatment algorithm*.)

Timely care

Nurses play an important role in promoting healthy skin and reducing injury. Skin care of patients with IAD requires timely assessment, prevention, and management, as well as knowledge of the interventions and products that can help ensure skin integrity. ★

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Transitioning wound care patients to post-acute care

Setting goals and meeting needs.

By Armi S. Earlam, DNP, MPA, BSN, RN, CWOCN; Lisa Woods, MSN, RN-BC, CWOCN; and Kari Lind, BSN, RN

Discharge to post-acute care settings such as rehabilitation and skilled nursing facilities, long-term care hospitals, and home health depends on the patient's overall health. Other factors that must be considered include the patient's cognitive and functional status; the home environment; family or caregiver support; access to services, medications, and transportation; and follow-up care. In this article, we'll focus on the needs of wound care patients who are transitioning to post-acute care.

Elements of a wound care discharge plan

When discharging a patient who needs wound care, acute-care clinicians (wound care nurse, discharging nurse, and case manager) should evaluate the comprehensive wound care plan, asking questions related to the goals of care, discharge setting, care provider, products and resources, patient factors that influence wound healing, and follow-up care.

What are the care goals?

Depending on the patient's situation, the three goals of wound care are healing, maintenance, and comfort. If the goal is wound healing, treatment should focus on wound granulation and eventual closure. However, if the wound is unlikely to heal (for example, an elderly patient with arterial wounds who is too frail for a vascular intervention), the goal is to keep the wound clean, stable, and free of infection.

For patients receiving end-of-life care, comfort is the goal. Treatment includes dressings that are changed less frequently, cause less pain, adequately absorb drainage, and control foul odor.

Keep in mind that goals may overlap and evolve, so the wound care plan should be modified as necessary.

Where will the patient go?

Wound severity and complexity may affect the choice of post-acute care setting. For example, a patient with multiple wounds requiring either negative pressure wound therapy (NPWT) or twice-daily dressing changes may be best placed in a long-term care hospital. On the other hand, someone who needs once-daily wound packing can be managed at home if the patient or family can perform dressing changes between home health nurse visits.

Additional considerations include clinician time needed to perform wound care and equipment availability. Some post-acute care settings may not have the resources for frequent dressing changes or clinician visits. The discharging facility must establish that the necessary equipment and clinical personnel are available.

Who will perform wound care?

Clinicians need to assess whether

the patient is functionally and cognitively able to perform wound care. If not, other options include a home health nurse or a family member or friend. If the patient lives in a remote area and wound care will be done by a family member with only periodic visits by a home health nurse, the in-patient nurse needs to assess the caregiver's ability to complete care tasks and provide education. The teach-back method allows caregivers to demonstrate what they've been taught so the home health nurse can assess comprehension and ability.

If the patient is being discharged to a setting other than the home, the facility must demonstrate the availability of clinicians who have the knowledge and skills to manage the prescribed wound therapy.

What products and resources will the patient need?

Each facility and agency has its own formulary of wound care products; the brands used in the hospital may not be the same used in post-acute care. The patient's insurer also may dictate what products will be used. For example, different manufacturers of NPWT products have contracts with different insurers, which will dictate what brand can be used at home.

Insurance companies reimburse home health agencies a set amount depending on the patient's diagnoses. Daily dressings or costly products may not be feasible after acute-care discharge. However, an expensive product that requires twice-weekly dressing changes rather than twice-daily saves clinician time, making it a more cost-effective choice. Alternatively, substituting a less-expensive comparable product or therapy for an expensive one without loss of efficacy may facilitate a timely transition.

What patient factors should be addressed?

After a patient is discharged from an acute-care facility, medication management, diet, and lifestyle

The discharging facility must establish that the necessary equipment and clinical personnel are available in the post-acute setting.

can help support wound healing. For example, patients with diabetes who have foot wounds must control their glycemic levels by following medication regimens and dietary recommendations, and patients who smoke should begin a cessation program. Patients with heart failure who have leg swelling and blistering that results in wounds must adhere to their diuretic therapy. To avoid infection that can impede wound healing, all patients must adhere to prescribed antibiotic regimens.

When treating pressure injuries, addressing the etiology is crucial. Clinicians or family members may be using the appropriate wound care products, but if the affected body part is not properly offloaded and pressure not redistributed adequately, then the wound treatment will be futile. For example, a pressure injury on the heel won't improve if the cause of the pressure isn't addressed by using offloading boots or pillows under the calves when the patient is resting in bed.

What are the follow-up care plans?

Discharge instructions should include detailed wound care guidelines and contact information for the provider with whom the patient should follow up. Plans for future supply procurement, conditions for revising the care plan, and access to transportation for follow-up care also should be considered.

Successful transitions

Safe and effective care transitions not only are best practices, but they're also essential in today's healthcare environment. Changes in reimbursement, including both incentives and penalties for certain discharge outcomes, along with a much-needed emphasis on quality, accountable care have encouraged this attention. Patient and family engagement and education, including their goals, preferences, and concerns, are fundamental to a successful transition. Nurses can help ensure that treatment goals and patient needs are met by providing support, education, and care. ★

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