

# Caring for Aging Skin: Preventing and managing skin problems in older adults

This article is part of a series, *Supporting Family Caregivers: No Longer Home Alone*, published in collaboration with the AARP Public Policy Institute. Results of focus groups, conducted as part of the AARP Public Policy Institute's No Longer Home Alone video project, supported evidence that family caregivers aren't given the information they need to manage the complex care regimens of family members. This series of articles and accompanying videos aims to help nurses provide caregivers with the tools they need to manage their family member's health care at home.

The articles in this new installment of the series provide simple and useful instructions that nurses should reinforce with family caregivers who perform wound care tasks. Each article also includes an informational tear sheet—*Information for Family Caregivers*—that contains links to instructional videos. To use this series, nurses should read the article first, so they understand how best to help family caregivers, and then encourage caregivers to watch the videos and ask questions. For additional information, see *Resources for Nurses*.

**F**amily caregivers of older adults are commonly involved in wound care. In a recent national sample, 35% of caregivers were performing wound care and found it to be one of the most challenging aspects of providing care.<sup>1</sup>

Intact skin is the first line of defense against infections, the environment, and trauma. As people age, skin changes and becomes thinner, drier, and more fragile.<sup>2</sup> These changes can make skin more susceptible to injury and infections. With age, it becomes more important to take care of skin to prevent injuries and infection.

The following is a discussion of common problems associated with aging skin, the risks of com-

promised skin integrity, and the preventive actions nurses can encourage family caregivers to take to promote healthy skin.

## DRY SKIN

Most older adults will experience xerosis, or dry skin. Xeroderma creates a fine powdery scale and accentuated creases in the palms of the hands and soles of the feet. Dry skin can cause itching, scaling, and cracking of skin, which allows bacteria to penetrate and can result in infection. The itching that accompanies dry skin can be localized or generalized, may interrupt sleep, and can cause scratching that further excoriates skin and may lead to infection. Skin dryness may be worse during the winter months, in heated buildings, and in areas of the

country that have low humidity.<sup>3</sup>

As people age, the subcutaneous layer of the skin becomes thinner and provides less protection from trauma and thermal changes. During exercise or hot weather, hyperpyrexia may occur owing to a reduced ability to sweat.<sup>3, 4</sup> In the deeper layers of the skin, sebaceous gland function may be diminished, leading to dry skin.<sup>3, 4</sup> Aging also affects healing and a person's susceptibility to skin injuries and infections.

**Prevention.** Skin dryness and associated itching can be prevented by limiting warm baths to three times a week and restricting the use of soap to the axilla, groin, scalp, and soles of the feet.<sup>5</sup> The regular application of a skin emollient can aid with

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the prevention of dryness. Skin emollients, such as petrolatum, shea butter, or cocoa butter, in the form of cream or ointment, should be applied while the skin is still moist to hold in moisture. Lotions can be used, but they evaporate and don't hold moisture in as well because of their high water content.<sup>5</sup> Care must be taken when applying an emollient, which can be slippery and potentially cause a fall.

Environmental factors deplete the moisture of the skin and exacerbate dryness and associated itching. Frequent use of harsh soaps or other personal care products, like powders, can dry the skin and cause itching, as can a low-humidity environment and the use of heaters and fireplaces.<sup>6</sup> Using a humidifier to moisten room air may help prevent dryness.

**Treatment.** Hydrating the skin is best accomplished by immersion in a warm (not hot) bath followed by the application of petrolatum or urea-based products, which help to bind water to the stratum corneum.<sup>5, 7</sup> Scaling of the skin can be controlled by using products that contain alpha hydroxy or lactic acid; however, the therapeutic value of using high concentrations of lactic acid is unclear—although it enhances scale removal, it can irritate inflamed, dry skin.<sup>5</sup>

## SKIN TEARS

Skin tears can be of partial or full thickness and are defined as wounds caused by shear, friction, or blunt force, resulting in the separation of the epidermis from the dermis.<sup>8</sup> Although these are superficial wounds, they are often very painful and can cause significant bleeding and bruising.<sup>8</sup> Skin tears can occur anywhere on the body but are most often found on the arms, legs, and back of the hands of older adults as a result of trauma; for example, when bumping into an object or sustaining a fall.<sup>9</sup>

**Prevention.** The prevention of skin tears involves protecting the skin from shearing, friction, or blunt force. Careful positioning and avoiding the application of adhesives, which may cause tearing of skin upon removal, are important factors in preventing skin tears. Additional preventive strategies include reinforcing the need for gentle care, encouraging those at risk to wear long sleeves and long pants, keeping the skin well moisturized, and creating a safe environment to prevent trips and falls.<sup>9</sup>

**Treatment.** Skin tear treatment depends on the tear type (type 1, 2, or 3), which varies according to the depth of the injury.<sup>9</sup> Early care involves controlling the bleeding by pressing a dry clean



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cloth or piece of gauze on the skin tear until bleeding stops.<sup>9</sup> The area should be cleaned with saline or warm water and patted dry. If a skin flap exists, replace and realign the flap. Apply a nonadherent dressing to the wound. Tape the dressing to itself to ensure the tape is not in contact with the skin. An alternate method is to secure the dressing with a wrap gauze and tie the ends.

## PRESSURE INJURIES

Pressure injuries, which are also known as decubitus ulcers or bed sores, are injuries to skin or underlying tissue that result from sustained pres-

sure, shear, and other factors.<sup>10, 11</sup> Although often found over bony prominences, they can occur in any anatomical location. Pressure injuries present in a variety of ways, ranging from intact skin with nonblanching erythema to full thickness tissue loss down to the muscle or bone.<sup>10, 11</sup> These wounds can develop because of impaired mobility or the use of medical devices, such as tracheostomy neck plates, wheelchairs, or orthopedic splints, which can cause injuries at the point of contact with the skin.

**Prevention.** It's important to assess high-risk areas of the skin at least daily and to check for any

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### Information for Family Caregivers

#### General Skin Care

##### Cleansing.

- Use liquid, lotion, or foam cleansers to clean skin.
- Foam cleansers can be used in place of shampoo. Spray onto a moist washcloth, massage into scalp for 30 to 60 seconds, and gently comb hair.
- Premoistened bathing cloths can be used to wash hair or can take the place of a shower or bath. Regular use of these cloths, which should not be flushed, can be costly.
- Wear gloves while providing incontinence care, which includes prompt cleansing. Wash hands before and afterward.

##### Skin protection.

- Protect skin from the harmful irritants found in stool and urine by applying skin protectants.
- Use products containing zinc, glycerin, petrolatum, or dimethicone.


##### Dry or calloused skin.


- For dryness, apply creams and ointments after cleansing (lotions may be used, but they don't hold moisture in the skin well because of their high water content). Avoid the application of cream or ointment to skin folds.
- For very dry skin, use products containing alpha hydroxy acid. These products may cause a stinging sensation during the initial application.
- For calloused skin on heels, use urea-based products. These products may cause a stinging sensation during the initial application.

#### Pressure Injury Prevention

- **Surfaces.** Ensure pressure redistribution over bony prominences by using air-filled overlays and seat cushions and high-specification foam mattresses. The use of a specialty surface does not eliminate the need for repositioning.
- **Keep repositioning.** Shift the person's weight using wedges for positioning. It's important to shift weight to relieve pressure on any one area.
- **Incontinence care.** Wash hands before and after care, wear gloves, and avoid diaper use (use absorbent pads instead).
- **Nutrition.** Adequate hydration and a balanced diet are needed to maintain healthy skin. Assess the person's nutritional needs regularly.

#### Family caregiver instructional videos about skin care can be found on AARP's website:

 Treatment of Skin Tears  
<http://links.lww.com/AJN/A100>

 Pressure Ulcers: Prevention and Skin Care  
<http://links.lww.com/AJN/A101>

For additional information and to access these videos in Spanish, visit AARP's Home Alone Alliance web page: [www.aarp.org/ppi/info-2017/home-alone-alliance.html](http://www.aarp.org/ppi/info-2017/home-alone-alliance.html).

areas of impairment (for example, nonblanching redness or discoloration, skin breakdown, edema, a change in the consistency of the tissue, or pain). If any are noted, the caregiver should contact the health care provider for prompt assessment while continuing to provide general skin care, including regular bathing, moisturizing, and timely incontinence care. For patients with impaired mobility, make regular small shifts in positioning and assess the skin under and around medical devices a minimum of twice a day.<sup>11</sup> Consider using air-filled or high-specification foam mattresses or other support surfaces, including off-loading devices, specialized seat cushions, and turning support systems, for both the prevention and treatment of pressure injuries.<sup>11</sup>

*Fingernails and toenails* should be trimmed and filed to prevent skin damage from scratching or inadvertent nicks. Nails tend to thicken or crumble with age because of their slowed growth; in addition, chronic, systemic disease, such as diabetes and vascular insufficiency, can compound physiologic changes and make older adults more susceptible to fungal infections, which can also thicken nails. Thick or untrimmed toenails can prevent a person from wearing appropriate footwear, making the feet more vulnerable to damage. Older adults can benefit from regular visits to a podiatrist or, if no podiatrist is available, a health care provider who can perform a thorough foot, nail, and skin evaluation and has access to specialty tools for trimming the toenails.

*Patients with incontinence* are at risk for skin damage owing to prolonged contact with moisture, and further damage may occur because of exposure to the enzymes present in stool.<sup>12</sup> The contact of stool or urine with skin may provoke skin breakdown, leading to pain and skin infec-



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Adequate hydration is also essential for skin health and the prevention of skin breakdown. Vitamins A and C contribute to epithelial and collagen formation and wound healing.

tions. Although adult diapers can be useful and practical, they should be avoided, if possible, because they need to be changed often and immediately after becoming wet or soiled. Prompt cleansing and protection of the skin (by applying skin protectants) may help to prevent skin breakdown.


**Treatment.** Pressure injuries can worsen quickly. These wounds should always be assessed by a nurse, physician, or other health care provider who can provide the caregiver with instructions on how best to care for the wound. During each dressing change, caregivers should use normal saline or potable water for cleansing, gently pat the wound dry, and apply a dressing recommended by the health care provider.<sup>11, 13</sup> In addition, caregivers should avoid positioning the patient directly on the pressure injury.


## DIET FOR HEALTHY SKIN

A balanced diet plays an important role in maintaining healthy skin. Eating poor-quality food can lead to undernutrition, which is associated with the development of pressure injuries.<sup>14</sup>

Protein is a macronutrient required for optimal skin integrity and wound healing.<sup>15</sup> Good sources of protein include dairy products, meat, poultry, seafood, eggs, nuts, seeds, and legumes. Adequate hydration is also essential for skin health and the

### Resources for Nurses

 Treatment of Skin Tears<sup>a</sup>  
<http://links.lww.com/AJN/A103>

 Pressure Ulcers: Prevention and Skin Care<sup>a</sup>  
<http://links.lww.com/AJN/A102>

AJN's resource page for supporting family caregivers includes previous articles and videos in this series.  
<http://links.lww.com/AJN/A81>

<sup>a</sup> Family caregivers can access these videos, which are available in English or Spanish, as well as additional information and resources, on AARP's Home Alone Alliance web page: [www.aarp.org/ppi/info-2017/home-alone-alliance.html](http://www.aarp.org/ppi/info-2017/home-alone-alliance.html).

prevention of skin breakdown. Vitamins A and C contribute to epithelial and collagen formation and wound healing.<sup>16</sup> Fresh fruits and vegetables, particularly yellow vegetables, are good dietary sources of these vitamins. ■

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DOI:10.1097/NHH.0000000000001046

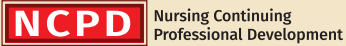
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