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SKIN TEARS

Care and Management of the Older Adult at Home

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Skin tears experienced by older adults require special skills to promote healing. Home healthcare providers are in key positions to manage skin tears and prevent further skin trauma. Several guidelines, risk assessments, classifications, and products exist to manage high-risk patients. Frequent evaluation of the effectiveness of the treatment and prevention strategies in an overall skin

care protocol for home care patients is critical to reduce skin tear incidence and promote prompt healing when skin tears are present.

Skin tears, one of the most dreaded consequences of trauma to aging skin, require a skilled assessment approach and special wound care practices to prevent complications and promote healing. Although skin tears can occur anywhere on the body including the buttocks and legs, the hands and arms are most vulnerable. Although recent figures are unavailable, it is estimated that skin tears affect 1.5 million hospitalized and long-term care older patients with prevalence rates thought to be between 14% and 24% (Bank & Nix, 2006; Malone et al., 1991). Approximately 5% of older adults residing in residential community settings have skin tears (Carville et al., 2007); however, the prevalence of skin tears of older adults living at home and/or receiving homecare is unknown and could be much higher than in residential settings.

With the increase in the aging population, especially in the old-old age group, and older adults living at home with chronic conditions, the care of the skin becomes a critical health issue. Home healthcare providers are in a key position to prevent skin tears. They are able to assess the home environment and can teach caregivers, families, and the older adults how to make simple modifications. The care of older adults with skin tears should focus on controlling bleeding, preventing infection, controlling pain, restoring skin integrity, and promoting a healing environment (LeBlanc & Baranoski, 2009). Risk assessment, skin tear classification, best-practice prevention, and treatment guidelines presented in this article should assist the home healthcare provider to manage skin tears and identify those at risk for these wounds.

Current definitions of skin tears suggest there are two types: a partial-thickness wound where the epidermis is separated from dermis secondary to friction or shearing force trauma; or, full thickness where both the epidermis and the dermis separate from the underlying tissue (Carville et al., 2007; Payne & Martin, 1993). Although skin tears do not usually result in serious problems, they can predispose persons to infection, cause major discomfort, and be costly to manage if not treated quickly and appropriately (Payne & Martin, 1993). Because skin tears are often mismanaged and misdiagnosed, methods to prevent, predict, assess, and treat skin tears have recently been the focus of an international consensus panel to

address the need for a validated, comprehensive program for managing skin tears (LeBlanc & Baranoski, 2011).

Susceptibility of Aging Skin and Risk Factors

Although skin tears can occur at any age, those 65 years old and older are at high risk and those 80 years old and above at greatest risk because of more pronounced physiological changes in the skin. Older individuals have also endured a lifetime of environmental exposure to the sun and other hazards, and have more chronic conditions that impact the skin.

Physiological Changes

Physiological changes play a pivotal role in initiating a cascade of events that predispose the skin to tearing, beginning with a 20% atrophy or “thinning” of the dermis and the epidermis (Ratliff & Fletcher, 2007). Thinning causes a weakening of the skin structure between its layers and produces a paper-thin appearance. The structures that keep the skin layers attached to each other flatten causing a decrease in the cohesiveness of the skin layers. For example, epidermal papillae flatten and the rete pegs or ridges—extensions in the epithelium that project down into the underlying connective tissue holding the epidermis and dermis together loosen, while the subcutaneous fatty layer becomes lessened. Effects of aging also result in a reduced blood supply. Fewer nerve endings decrease sensation, particularly in response to pain, tactile sensitivity, and temperature (Sibbald & Krasner, 2009). Many older adults are unaware that a skin tear has occurred until they see droplets of blood on their clothing or are told by another person that their skin is bleeding.

Decreased cell growth and turnover rate as well as decreased production of sebum (oil) glands and sweat glands result in dry and itchy patches of skin. The immune system is weaker due to decreased production of T-lymphocytes and mast cells with subsequent reduction in antigen response, thus increasing the risk of infection and cancer. The skin becomes less elastic and the tensile strength weakens, causing the skin to be less resilient or quick to recover from abrupt changes. Vascular changes caused by capillary fragility and pathological change from

atherosclerosis cause rupture with subsequent bruising (senile pupura) or ecchymosis beneath the skin. Approximately 40% of skin tears are associated with senile purpura, which tend to occur on the back of the hands (Ratliff & Fletcher, 2007). Medications such as corticosteroids compromise skin integrity. Corticosteroids inhibit collagen synthesis and reduce the strength and elasticity of the skin. The combination of aging, pathological changes in the vascular system, comorbid conditions such as cancer, as well as medications lead to a higher risk of tears (Xu et al., 2009).

Appearance

For some older adults, changes in the physical appearance of the skin can lead to negative psychological consequences. Many express dismay at paper-thin skin and bruising, especially the back of their hands, the second most visible part of the body after the face. This perceived unsightly appearance of the skin may lead to social isolation and depression. Unfortunately there are limited “cosmetic” approaches to conceal frail skin.

Review of the Literature

There is a limited body of knowledge that includes studies that contribute to best practices, prevalence, and an understanding of the

financial burden to older adults living at home. There are few randomized clinical trials or systematic reviews; however, there are a growing number of guidelines and consensus statements published in the last 5 years on skin tear prevention and management. A recent international consensus statement, published in 2011 (LeBlanc & Baranoski, 2011) was based in part on the data from a large international survey (LeBlanc & Christensen, 2010) conducted by the lead author of the consensus statement. The survey focused on exploring current practices on the assessment, prediction, prevention, and treatment of skin tears of healthcare professionals from 16 countries (LeBlanc & Christensen, 2010). Of the 1,127 respondents surveyed, 69.6% reported a problem with current assessment and documentation of skin tears in their practice settings. In particular, approximately 90% admitted to not using any instrument or classification system for assessing and documenting skin tears. They indicated they would use a simplified method for documenting and assessing skin tears if available. The findings from this survey continue to support the need for more research aimed at the prevention, prediction, assessment, and treatment of skin tears. Fortunately, the international consensus statement (LeBlanc & Baranoski, 2011) on skin tears serves as a guide for clinicians in home care settings.

Practice Guidelines

There are a number of clinical practice guidelines and best practice recommendations available for skin tears (Box 1). For example, the State of Pennsylvania developed a statewide skin tear initiative, *Preventing Pressure Ulcers and Skin Tears*, a toolkit available for downloading at <http://www.guideline.gov> through the National Guidelines Clearinghouse (Pennsylvania Safety Authority Skin Tear Initiative, 2006). The toolkit focuses on preventing skin tears, identifying those at risk, and fostering healing of skin tears, targeting those who are immobile, undernourished or malnourished, incontinent, have friable skin, and impaired cognition. As part of this guideline, the Payne-Martin Classification System (LeBlanc & Baranoski, 2011; Payne & Martin, 1993) is recommended to categorize skin tears. The guideline also provides recommendations for

Box 1. Resources

- *Preventing Pressure Ulcers and Skin Tears Toolkit*: <http://www.guideline.gov>
- *The Best Practice Recommendations for the Prevention and Treatment of Skin Tears* (LeBlanc & Baranoski, 2009)
- *Payne-Martin Classification System* (Payne & Martin, 1993)
- *International Consensus Statement* (LeBlanc & Baranoski, 2011)
- *Skin Tear Audit Research (STAR) Classification System* (Carville et al., 2007)
- *Skin Integrity Risk Assessment Tool* (White et al., 1994)
- *Say Goodbye to Wet-to-Dry Wound care Dressings* (Dale & Wright, 2011)

promoting a safe environment by educating staff and caregivers, protecting the older adult from self-injury or injury during routine care, and managing skin tears if they occur. *The Best Practice Recommendations for the Prevention and Treatment of Skin Tears* (LeBlanc & Baranoski, 2009) and the *International Consensus Statement* (LeBlanc & Baranoski, 2011) both promote recommendations consistent with the toolkit but suggest the Skin Tear Audit Research (STAR) Classification System (Carville et al., 2007) for classifying skin tears, touting the fact that it is simpler to use. Regardless of which classification system is used, it is imperative to classify skin tears for the purpose of guiding management strategies and documenting healing outcomes.

Classification Systems for Skin Tears

The first classification system for skin tears was developed by Payne and Martin in 1993 and groups characteristics and degrees of skin damage into three main categories:

- Category I: Skin tears without skin loss (which takes about average 10 days to heal),
- Category II: Skin tears with partial-thickness skin loss (healing takes an average of 14 days), and
- Category III: Skin tears with complete tissue loss (average 21 days to heal).

This skin tear classification system was further developed for the STAR project, which resulted in the validated STAR Skin Tear Classification System (Supplemental Digital Content 1, <http://links.lww.com/HHN/A23>) (Carville et al., 2007). Nurses in home settings should consider using STAR as part of the overall skin assessment when skin tears are present. However, to prevent the occurrence of skin tears, the steps of an overall skin tear prevention approach begin with predicting which patients are at high risk.

Step 1: Predicting Risk

It is critical to predict and identify those at high risk for skin tears so that an appropriate prevention program can be implemented before injury occurs (Bank & Nix, 2006; Carville et al., 2007; LeBlanc et al., 2008). Older adults are at high risk for the development of skin tears in

home care settings, and thus, a comprehensive risk assessment for skin tears should be performed on all older patients. Guidelines recommend a risk assessment be performed that includes a head-to-toe assessment on admission to the home health agency, with a change in the individual's condition, or per agency/facility policies (National Pressure Ulcer Advisory Panel and European Pressure Ulcer Advisory Panel, 2009).

Unlike well-validated risk assessment instruments used to determine pressure ulcer risk such as the Braden Scale (Bergstrom et al., 1987), there is a lack of validated instruments to predict skin tear risk, and the use of existing instruments (STAR) to classify skin tears are generally underused. Although developed almost 20 years ago, the Skin Integrity Risk Assessment Tool (LeBlanc & Baranoski, 2011; White et al., 1994) is relevant for home care patients as it places patients into groups and recommends implementing a skin tear risk prevention plan for those patients who meet:

- any criteria in Group 1: history of skin tears within last 90 days; has open skin tear;
- four or more criteria in Group 2: decision-making skills impaired; vision impairment; extensive assistance/total dependence for activities of daily living (ADLs); wheelchair-assistance required; loss of balance; confined to bed or chair; unsteady gait; bruises;
- five or more criteria in Group 3: physically abusive, resists ADL care; agitation; hearing impaired; decreased tactile stimulation; wheels self; manually/mechanically lifted; contracture of arms, legs, shoulders, hands; hemiplegia/hemiparesis; trunk—partial or total inability to balance or turn body; pitting edema of legs; open lesions on extremities; three to four senile purpura on extremities; dry, scaly skin; or
- three criteria in Group 2 and three or more criteria in Group 3.

Risk Factors

Although physiological changes in the skin contribute to the predisposition of skin tears in older adults, older adults who return home

from the hospital after a critical illness such as a myocardial infarction or stroke, those who are medically compromised (diabetes, thyroid disorders), and those who require assistance with ADLs or have altered mobility are particularly vulnerable to skin tears with even the most minimal of friction or shear force trauma (Carville et al., 2007; LeBlanc et al., 2008). In addition to medical and functional comorbidities, cognitive impairment, dehydration, poor nutrition, medications (immunosuppressives, anti-inflammatories, anticoagulants), alkaline soaps and antibacterial skin cleansers (strip protective acid mantle; see Box 2) and smoking place older adults at high risk for skin tears (Bank & Nix, 2006; Sibbald et al., 2006). Multiple factors should be included in the overall skin assessment to determine skin tear risk (LeBlanc & Baranoski, 2011; LeBlanc et al., 2008; Stephen-Haynes et al., 2011). Risk factors for skin tears in older patients residing at home are extensive and include five major areas: skin problems, comorbid conditions, functional impairments, cognitive dysfunction, and environmental hazards (White et al., 1994). High risk factors for skin include a history of tears within 90 days, one or more open tears, skin that bruises easily, presence of purpura, long nails that can traumatize intact skin, and skin that

is macerated or moist. Several comorbid conditions also place older patients at risk including diabetes, thyroid disorders, stroke, chronic lung disease, malnutrition, dehydration, and taking medications such as corticosteroids and anticoagulants. Impaired function in vision and hearing, as well as neuropathy that causes loss of protective sensation, impaired balance, or unsteady gait, increases one's risk. Those using assistive devices and having edema of the legs can suffer skin tear of the lower extremities. Cognitive problems related to agitation and combativeness are related to skin tears caused by trauma from flailing limbs.

Step 2: Prevention Strategies

Most skin tears occur accidentally during routine patient care activities. Education and involvement of family and caregivers in the prevention of skin tear development is imperative. Many of the basic strategies for prevention of a skin tear, while appearing to be commonsense approaches, should be included in the prevention plan. It is also important to remind caregivers that despite their best efforts, not all skin tears are 100% preventable (Roberts, 2007). However, every effort should be made to prevent skin tears whenever possible. The following prevention steps can be taken to minimize the potential for occurrences or reoccurrences to reduce the opportunity for future skin injury. Several recommendations focus on environmental management, the maintenance of skin integrity and factors such as nutrition and hygiene (Hampton, 2010; Krasner, 2010; LeBlanc & Baranoski, 2011; Sussman & Golding, 2011).

Create a Safe Environment

A safe environment is a critical component of an overall prevention plan. Several actions should be implemented as follows:

1. Assess the home environment for routine household items that cause an accidental skin tear such as exposure of sharp corners of countertops, open drawers, or other protruding objects. Provide adequate lighting to aid in avoiding unnecessary bumps or knocks to the skin against firm objects. Limit items with protruding legs such as tables and footstools that can be accidentally

Box 2. Soaps

Avoid alkaline, antibacterial, or heavily perfumed soaps that can be drying for aging skin:

- Dial
- Irish Spring
- Ivory
- Zest

Instead, recommend patients use pH-balanced products such as:

- Basis
- Aveeno
- Neutrogena

Source: Barbara Dale, personal communication, March 30, 2012.

bumped as older adults are moving about their homes. Remove small throw rugs or shoes that could be easily tripped over.

2. Move or transfer older adults with altered mobility correctly across a bed or into a chair to prevent shear and friction that could cause tears on the buttocks or arms. The adaptation of good manual handling techniques with the use of lift devices, draw sheets, or slide sheets can prevent or decrease shear or friction injury. Special belts can aid in assisting older adults to stand from a sitting position. Care must be taken when using any adaptive equipment and requires instructions to caregivers on proper use.
3. Pad bed rails, chairs, wheelchairs, or walkers to prevent accidental skin tears when arms or legs bump against these firm surfaces. Commercialized arm and shin pads can be used on the extremities for protection against rubbing or hitting an extremity on a hard surface.

Maintain Skin Integrity

One of the most crucial aspects of prevention is to keep the skin in the best possible condition. Steps to foster skin integrity include:

1. Ensure optimal nutritional to improve basic skin health, assist with the healing of a current skin tear, and aid in the prevention of future skin tears. Dietitians can provide information on the amount and types of foods that are important for wound healing such as dairy products, meats, beans/legumes, nuts, eggs, and soy products. Recommendations often include adding additional protein in the daily diet or supplemental nutritional drinks. It is important that a tailored plan be developed as many older adults have food sensitivities and conditions that affect digestion and absorption of nutrients. Overall, older adults are encouraged to consume four to six small meals per day and should consider taking a daily multivitamin after discussion with their healthcare provider.
2. Encourage hydration by providing additional fluids between meals as well as a variety of fluids throughout the day, unless there is a fluid restriction. Hydrated skin is at lower risk of tearing. It is recom-

mended people drink at least 2 to 3 quarts of fluid daily but this can vary based on the size of the individual. Fluids can include any noncaffeinated beverages, water, juice, sports drinks, or milk. Any food that turns to liquid in the mouth is considered a fluid such as yogurt, ice cream, jello, and popsicles. Handy water bottles also provide an easy option for older adults to use, especially those with tremors or arthritic hands.

3. Use hypoallergenic moisturizers twice each day especially on the hands and arms to help hydrate dry aged skin. It is best to apply moisturizers after showering when the skin is still damp to aid in maintaining skin elasticity and resilience.
4. Routine bathing and shower should be limited. The natural decrease in lubrication from diminished sebaceous and sweat gland activity places older adults at a higher risk for skin tears as the skin becomes more susceptible to dryness. Bathing removes the body's natural oils from the skin surface and can be naturally dehydrating. A shower with warm-tepid water, approximately 94°F, is preferred over tub baths. Cleansing with mild pH-balanced soaps is recommended. Unfortunately most soap is alkaline, which tends to increase the pH of the skin and reduces the skin's protective acid mantle. Healthy skin is meant to have a pH in the range of 5.4 to 5.9. For many older adults, the use of soap is not indicated, especially for arms and legs. With the decrease in the skin's natural lubrication, application of moisturizers to damp skin after bathing will aid in skin hydration. Consider nonalkaline and glycerine-based products and washes, many of which are available over-the-counter.
5. Protect arms and legs with long sleeves and pants. Tubular stockinet on arms or thick athletic socks with the foot cut out can be placed on the arms for additional protection. Avoid tight and restrictive clothing that can interfere with ease of movement. Also encourage older adults to wear protective footwear with hard soles to prevent them from tripping when walking.
6. Avoid adhesives on fragile skin. Use skin sealants applied to the skin under tapes to

reduce skin damage during tape removal. It is advised to use adhesive removers to facilitate tape removal while applying counter pressure to the skin in the opposition when the tape is slowly rolled off. If tape is used on the skin, do so minimally if possible. Silicone, paper, and cloth hypoallergenic tapes are gentler for removal than other tapes.

7. Assess the length of fingernails and toenails to determine the need for trimming or filing. Long fingernails of caregivers, family, or older adults themselves can cause skin damage from scratching or accidental pinches. Many care providers are discouraged from wearing artificial nails as they can harbor organisms that, if passed onto open skin, can cause infection.

Step 3: Treatment

Although prevention of skin tears should remain the primary focus, evidence-based wound care principles should be used when a skin tear develops. The same principles used for other wounds should be employed when treating skin tears. A wound treatment plan (see Box 3) should also consider nutritional support, pain management, local wound conditions, and optimal dressing selection (Sibbald et al., 2006). Wound assessment should be performed, with the documentation of local wound conditions (location, size, flap status, exudate, pain) and skin tear category. A multifactorial plan should include:

1. Cleanse the wound to remove surface bacteria and necrotic debris as this prepares the wound for the dressing. This can be achieved by irrigating with noncytotoxic solutions such as normal saline or nonionic surfactant cleansers using safe pressures of less than 10 to 15 pounds per square inch (psi). A 19-gauge angiocatheter and a 35-mL piston syringe can also be used. Skin tears without debris should be gently cleansed at lower pressures (less than 8 psi to protect granulating tissue, using similar cleansers (Gardner & Frantz, 2008; Krasner, 2010; Sibbald et al., 2006). Most cleansers come with specially designed spray bottles to deliver the appropriate force of pressure to cleanse the wounds. Tepid showers are acceptable to cleanse and rinse the wound as well. Rubbing or wiping over

the wound is contraindicated as it can disrupt fragile tissue.

2. Apply dressings to cover, protect, and aid in healing the skin tear. There are several dressing options (Table 1). Selection is based on products available to the home healthcare agency, clinical expertise, and the degree of skin damage from the skin tear. Ideally, dressings for skin tears should absorb the exudate (drainage), maintain a moist wound environment, allow for pain-free removal, and stay in place for several days, no longer than 7 days. Moist wound healing remains the method of choice when selecting a dressing and has a high level of evidence to support the use for skin tears. Moist wound healing provides an environment that supports cell growth and healing (Baranoski, 2008).

Several recommendations (Ovington & Pierce, 2001; Stephen-Haynes & Carville, 2010) guide the selection of dressings that will:

- Maintain constant moisture balance,
- Suit the local wound environment,
- Protect the periwound skin,
- Control or manage exudate,
- Control or manage infection, and
- Optimize caregiver time.

Skin tears should be treated in a systematic way to include cleansing with normal saline, controlling bleeding, removing a clot, and selecting an appropriate dressing to address the wound characteristics. Hydrogels can be placed over the skin tear and if there is a need to manage exudate, absorbent dressings such as hydrofibers and alginates can be used. Nonadherent dressings such as soft silicone products, those with a petrolatum base, and mesh are appropriate for minimally exuding skin tears.

Closure of the skin tear, based on wound characteristics, should be considered. Unlike chronic wounds, skin tears are acute wounds with the potential to be closed by primary intention. Wounds closed by primary intention are traditionally secured with suture or staples; however, given the fragility of aged skin, sutures, and staples are not viable options. The practice of using adhesive strips for skin tears is dated, and although

no current research is available to support a change in practice, expert opinion suggests that adhesive strips are not an appropriate treatment option of choice to close skin tears (Fleck, 2007; Roberts, 2007).

3. Replace the skin flap, if possible, by gently rolling the skin flap over the wound. Best practice supports that a skin flap be approximated if possible, and a hydrogel, alginate, foam, soft silicone, or nonadherent dressings be applied over the replaced flap, depending on the wound characteristics (LeBlanc & Christensen, 2005; LeBlanc et al., 2005). A skin flap may not cover the entire wound, but should be positioned to increase the chance for it to “take” onto the wound bed. The skin flap can be approximated by using a moistened cotton tip applicator and gently “rolling” the skin flap into place. If the skin flap is not viable, treat accordingly to the agency policy on debridement of nonviable tissue. A hardened or blackened flap is considered eschar (nonviable) and should be removed as it can impede healing.

An absorbent, clear acrylic dressing has been successfully used to treat skin tears with low-to-moderate exudate (LeBlanc & Christensen, 2005; LeBlanc et al., 2005; Roberts, 2007). Two benefits of this dressing are the ability to leave it on for an extended period and the dressing has a clear window for wound assessment. Because of their semi-permeable properties they can be left in place for 3 to 7 days as long as the wound does not exhibit any signs or symptoms of infection. Data suggest that the use of hydrocolloids or traditional transparent film dressings, both of which are slightly adhesive, be avoided as they may cause skin stripping and injury to the healing skin tear if not removed properly. Wet-to-dry dressings are contraindicated for use on skin tears. These dressings are considered a method of mechanical debridement and can be a significant source of pain when removed (Dale & Wright, 2011).

Most skin tears are “wet” from serous exudate produced in the first 24 to 48 hours of the moist phase of healing, thus not all dressings are able to handle this volume of wound fluid (Keast et al., 2006). Pooling and leaking of the exudate can exacerbate skin irritation, cause maceration, and denude the

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skin. There is also the potential risk of further skin damage using an adhesive dressing by lifting the skin flap during dressing removal. When a skin flap is present, it may be helpful to draw an arrow on the outside of the dressing to indicate the direction of the skin flap so that the dressing can be removed with minimal disruption of the flap. The use of a calcium alginate dressing or a hydrofiber may be warranted during the initial moist phase for fluid absorption. Calcium alginates may be helpful when hemostasis is needed for a bleeding skin tear. If the skin tear is infected or extensive, the wound should be assessed by the healthcare provider or a wound care specialist to determine the best treatment.

For less exuding skin tears, alternatives to nonstick or petrolatum dressings include hydrogels or hydrogel sheets. These are gentle to the periwound skin, create a moist wound environment, and are generally able to handle the initial fluid from the wound during the early healing stages. These can generally be left in place for 1 to 3 days. These dressing are also soothing and reduce pain.

4. Secure the dressing with nonadherent products such as stockinettes, roll gauze secured to itself, and tubular dressings. These often come on a roll and are a cost-effective way to secure a dressing as well as protecting the

Table 1. Dressings and Products

Amount of Drainage From the Skin Tear Wound	Examples of Products to Use	Practical Tips
<i>Small-to-moderate exudate from a skin tear wound</i>	Transparent film dressings	<ul style="list-style-type: none"> • Only indicated for minimal exudate • Change weekly and prn • Inexpensive • Allows for visualization of the wound bed • Protect periwound skin with skin sealant
	Nonadherent dressings <ul style="list-style-type: none"> • Telfa dressing • Petroleum-impregnated gauzes • Lipidocolloid-based mesh 	<ul style="list-style-type: none"> • Nonadherent gauze, allows for exudate to wick to a secondary dressing • Protects wound from trauma and dehydration • Can change the secondary dressing and leave the nonadherent layer undisturbed for atraumatic dressing change • Will require a secondary dressing and a method of securement (tubigrip, kerlix, stockinet)
	Hydrogel or hydrogel sheets	<ul style="list-style-type: none"> • Apply hydrogel daily • Change hydrogel sheets every 1 to 3 days • A secondary dressing and method of securement is needed • Atraumatic removal • Protect periwound skin with a skin sealant
	Foam dressings	<ul style="list-style-type: none"> • Change dressing every 3 to 7 days and prn, depending on the amount of drainage; need to change the foam when there is 75% drainage strike through (Bates-Jensen & Ovington, 2007) • Painless atraumatic removal with silicone based foam dressings
	Acrylic dressings	<ul style="list-style-type: none"> • Can see through the dressing to allow for visualization of the wound bed • Does not adhere to the wound bed • Gentle to remove from the skin • Change dressing every 3 to 7 days and prn • Make sure there is 0.5 to 1.0 in of intact skin around the wound that is covered by the dressing • If the wound edges become macerated, discontinue the acrylic dressing
<i>Moderate-to-large exudate from a skin tear wounds</i>	Calcium alginate	<ul style="list-style-type: none"> • May help with hemostasis of bleeding areas • Absorbs moderate amounts of drainage • Requires secondary dressing • Change alginate and secondary dressing every 1 to 2 days • The calcium alginate must be in a gel state when it comes out of the wound bed, otherwise the wound is too dry for use
	Hydrofibers	<ul style="list-style-type: none"> • Absorbs high amounts of drainage • Requires secondary dressing • Change hydrofiber and secondary dressing every 1 to 2 days • The hydrofiber must be in a gel state when it comes out of the wound bed, otherwise the wound is too dry for use
	Foam dressings	<ul style="list-style-type: none"> • Change dressing every 3 to 7 days and prn, depending on the amount of drainage; need to change the foam when there is 75% drainage strike through (Bates-Jensen & Ovington, 2007) • Painless removal with silicone based foam dressings • Can be used in conjunction with calcium alginate or hydrofiber for wounds with a large amount of drainage

Note: prn = may need to change more frequently (e.g., twice daily) for heavy exuding tears.

Box 3. Case Study

Introduction

Mrs. H is an 89-year-old, frail client residing at home with her 62-year-old sister. She is followed by a home health agency and has a personal care aide for 2 hours, 5 days per week and receives Meals-On-Wheels Monday through Friday. She has multiple comorbidities including moderate dementia, Type 2 diabetes, chronic obstructive pulmonary disease, coronary artery disease, lower extremity arterial disease with bilateral lower extremity stent placements, hyperlipidemia, osteoporosis, and depression. She is on multiple medications including prednisone and aspirin. The patient's vision is poor, balance is unsteady, has poor mobility, and uses a walker with assistance. Her skin is paper thin and easily bruised. The patient voices embarrassment that her skin is unsightly. The home environment is in disrepair, the lighting is poor, and it is cluttered with furniture and throw rugs.

Case Scenario

The home health aide assisted Mrs. H to the bathroom for her daily bath. When transferring the patient to the tub shower chair, Mrs. H. fell, resulting in skin tears on her leg (Figure 1) and arm (Figure 2).

Management Plan

The home health nurse is notified to assess the patient regarding skin tear management. Once the wound bed is cleansed, the registered nurse categorizes the skin tears using the Skin Tear Audit Research (STAR) Skin Tear Classification System. The leg wound is a partial-thickness skin tear without a skin flap or Category 3. The arm wound is dusky in appearance and has a partial skin flap remaining. The leg wound is classified as a Category 2b skin tear. The periwound skin is edematous, fragile, and bruised. The registered nurse reviews the agency's formulary to select dressings that will maintain constant moisture, protect the periwound skin, control the exudate, and is user friendly to apply and remove. The right lower leg wound has a moderate amount of serosanguinous drainage. Calcium alginate dressing is used to absorb the drainage and support hemostasis. A skin barrier is applied to the fragile periwound skin. The wound is covered with a nonadherent foam dressing and secured with a tubular stockinet. The arm wound has minimal serous drainage. Skin barrier is applied to the fragile periwound skin, then a nonadherent silicone contact layer is laid upon the skin tear and flap over which a clear acrylic dressing is applied that allows for visualization of the wound. An arrow is drawn on the outside of the acrylic dressing indicating the direction of the skin flap. This will aid in minimal disruption of the skin flap when the dressing is changed. Three days later, both dressings were reassessed to be dry and intact. The dressings were left in place then changed weekly.

Education

Because of Mrs. H's age, history of skin tears, altered cognition, decreased mobility, altered sensory status due to diabetes, polypharmacy, vision impairment, and thin, frail frame, she is at greater risk for developing more skin tears. The registered nurse instructed the patient/family on the basics of skin hygiene such as using warm water during baths, recommended soapless or pH neutral/balanced cleansers and encouraged the application hypoallergenic moisturizer to damp skin. The nurse also suggested bathing Mrs. H no more than three times a week to decrease dryness of the skin. Suggestions to provide protection from trauma during routine care and activities of daily life were made. Several ideas such as wearing shin and arm padded guards, wearing long pants and long-sleeved shirts may help to prevent future accidental skin tears from occurring. Recommendations were made to clear pathways in which to walk: remove throw rugs, extra furniture and clutter for prevention of future accidental skin tears. The nurse also discussed proper nutrition and fluid intake to promote healing and hydration.

Conclusion

In review of her visit with Mrs. H, the registered nurse recognizes that skin tears are a common problem in older adults and that prevention should be the primary focus through appropriate assessment of risk factors and education on prevention measures.



Figure 1. Partial thickness skin tear to the right lower leg (Category 3).



Figure 2. Dusky skin flap of skin tear on the left forearm (Category 2b).

Frequent evaluation of the effectiveness of the treatment strategies is imperative. If older adults express pain, particularly during dressing removal, consider analgesic options. Pain can disrupt quality of life and can impede healing. The ease of application and costs of dressings should be major considerations as caregiver responsibility can be overwhelming when meeting multiple needs of their older loved one.

limb from further trauma. If tapes and adhesives are the only option to secure the dressing, nonaggressive, hypoallergenic paper or silicone tapes are preferred. The use of skin sealants applied to the periwound skin around the wound edges as well as under the dressing or tape is helpful to avoid further tissue damage from moisture and trauma. Care should be taken when removing any dressing or tape. These should be removed by gently lifting off the dressing, starting at one edge, while pressing and gently applying pressure and drawing the skin taut. It is important to premoisten the dressing with saline if it has adhered to the skin to prevent further damage to the healing wound.

Step 4: Evaluation

Frequent evaluation of the effectiveness of the treatment strategies is imperative. If older adults express pain, particularly during dressing removal, consider analgesic options. Pain can disrupt quality of life and can impede healing. The ease of application and costs of dressings should be major considerations as caregiver responsibility can be overwhelming when meeting multiple needs of their older loved one.

Conclusion

Older adults living at home, especially those at high risk of developing skin tears, require a thorough risk assessment of factors that are amenable to prevention. Armed with an overall risk assessment approach and a thorough

understanding of risk factors, home care providers are in key positions to reduce skin tear incidence and can initiate prompt treatment when skin tears are present. Clinical guidelines and best practices are available, such as those proposed in this article, to aid in the development of a skin tear prevention and management approach for use in home care settings as part of the overall skin care protocol for your agency. ■

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