

# CARING FOR PEOPLE WITH SKIN TEARS

Skin tears are acute wounds, occurring as the result of a fall, blunt trauma, poor manual handling or damage from equipment. They cause unnecessary pain, discomfort, anxiety, and stress to patients and their families, and may result in extended treatment time if not managed appropriately, increasing the risk of infection to damaged skin, and impacting negatively on quality of life. This article explores the various aspects of assessment, classification, treatment and management of skin tears.

**T**he majority of skin tears are caused as a result of trauma, resulting in the separation of the two layers of skin, the epidermis and dermis (Fleck, 2007), with or without disruption of the blood supply (Carville et al, 2007). The wounds may be partial thickness or full thickness, depending on the extent of the injury. Where underlying pathologies — such as venous disease — are present, delayed healing may occur unless appropriately managed.

## **Who is at risk of developing skin tears?**

Skin tears occur mainly in immature skin in premature babies and neonates and also in older people. There are different reasons for the increased incidence in these groups of people. Patients on long-term steroids, those with gross oedema and a range of other chronic conditions are also at increased risk because of the fragility of their skin (*Box 1*).

In a full-term infant, the skin is only 60% of the thickness of the adult skin (All Wales Tissue Viability

Forum, 2015) and consequently more easily damaged. In premature babies, the skin is immature and skin tears are mainly related to device retention, caused by the removal of adhesive tapes used as securement.

## **Ageing and incidence of skin tears**

Skin tears are acute wounds, traumatic injuries or lacerations, occurring as the result of a fall, blunt trauma, poor handling or damage from equipment. In older or frail adults, skin tears can occur anywhere on the body. Fleck (2007) stated that 80% occur on the arms and back of the hands with the remainder predominantly occurring to the legs. Older people with fragile skin are not generally suitable to have suture or staple closures.

In normal ageing, there are changes to the structure of the skin that alter the skin's elasticity and tensile strength (Baranoski, 2003):

- ▶▶ The top layer, epidermis becomes thinner and flattened
- ▶▶ There is less collagen and elastin produced

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- ▶ Sweat glands and sebaceous glands are less efficient causing the skin to become dry
- ▶ The blood vessel walls become thinner and the blood supply reduced to the extremities
- ▶ More importantly, the rete ridges in the dermal — epidermal junction flatten, making damage by shearing far more likely.

In addition to the above, 70% of older people have skin complaints that adversely affect their day-to-day living (All Party Parliamentary Group on Skin, 2000). The skin's elasticity and tensile strength decreases with age (Baranoski, 2003). This is due to loss of dermal matrix and subcutaneous tissue, epidermal thinning and moisture loss (*Box 1*). These conditions may result in the person having vulnerable, fragile skin often described as being like tissue paper, or skin which bruises easily.

Older people are, therefore, at increased risk of skin damage, such as skin tears. The risk increases with age (Wounds UK, 2012; NHS Education for Scotland, 2015) — the largest proportion reported in the 75–84 age cohort (Pennsylvania Safety Reporting System, 2006).

**Reduced mobility and skin tears**

People cared for in long care homes or assisted by carers or nurses to carry out their Activities of Daily Living (ADLs) at home have been found to be at greatest risk. Minimal friction or shear trauma has been found to be the major cause of a skin tear (Carville et al, 2007). Fleck (2007) found that 25% of all skin tears in this group of adults resulted from wheelchair and chair transfers. Most of these skin tears were found to have been avoidable.

**Reducing the risks of skin tears**

All healthcare professionals providing care are in an optimum

position to reduce the incidence of skin tears and to initiate prompt appropriate care when skin tears are identified.

The adoption of good handling techniques may prevent or decrease shear, friction or trauma. In addition, for those providing care, nails should be kept short and the wearing of jewellery other than a plain wedding band should be avoided as they increase the risk of trauma.

Actively preventing skin tears should always be the main priority. Small environmental changes can significantly reduce the risk of them occurring. Small rugs in the home can be trip hazards and ideally should be removed. Improved lighting in the home may also prevent people bumping into furniture, and careful placement of furniture, for example, low coffee tables, can also reduce the risk of accidental damage.

Applying emollients twice daily can reduce the prevalence of skin tears by 50% (Carville et al, 2014). Advice should, therefore, be given on moisturising the skin. Emollients should be applied gently and, if possible, in the direction of hair growth to prevent folliculitis. Small changes, such as wearing long sleeved/legged garments, may reduce the incidence of sustaining skin tears to arms and legs.

Advice on improving the nutritional status should be personally tailored to the person's needs and a dietitian referral or dietary advice given. For example, they may require additional protein or require supplements to improve their nutritional status. They may require to eat small meals more frequently than they used to do. Information, advice and encouragement should be given on how to increase fluid

**Box 1. Additional risk factors for skin tears.**

Advanced age
Dependency for Activities of Daily Living (ADLs)
History of previous skin tears
Compromised nutritional status or dehydration
Visually impaired
Sensory impairment
Cognitive impairment
Limited mobility
Anxious or agitated people who flail their arms or legs about
Incontinent
Patients with oedema to their arms or legs
Patients with blood disorders
Patients with poor circulation
Warfarin
Corticosteroids
People with diabetes
Chronic obstructive pulmonary disease patients
Renal failure
Chronic heart failure

intake to ensure that the person is well hydrated as dehydration is a significant risk factor.

Including patients as partners in the decision making about their skin care helps empower them and, therefore, information should be aimed at patients, their family and carers, both formal and informal.

### **Classification of skin tears**

Clinicians should ensure that clinical management of patients with skin tears is based on the current evidence. There is an International Skin Tears Advisory Panel (ISTAP) dedicated to growth in the awareness, prevention and management of skin tears. There are also a number of clinical practice guidelines written to inform nurses and all members of the multidisciplinary team on the management of skin tear wound

management in all clinical areas (Best Practice Statement, 2012; NHS Education for Scotland, 2015; All Wales Tissue Viability Nurse Forum, 2015).

The degree of damage relating to skin tears was first categorised in 1993 (Payne and Martin, 1993). More recently, the classification system has been revisited and redefined, and two new categorisations proposed: The Skin Tears Audit Research (STAR) Classification System was first validated for use in 2007, then updated in 2010 (Curtin University of Technology, 2010), and the International Skin Tear Advisory Panel (2014) proposed a further system of classification.

The basic goals of skin tear management according to STAR are:

- ▶ Control bleeding
- ▶ Prevent infection
- ▶ Control pain
- ▶ Restore skin integrity promote a healing environment.

### **What to do if a skin tear occurs**

Should a skin tear occur, the healthcare professional should consider the following points:

- ▶ The specific treatment will depend on the anatomical position and dimension of the wound, and the classification of the skin tear
- ▶ The first step in assessment would be to assess the wound, the skin flap and surrounding skin, and to classify the category of skin tear based on the tool used in the clinical area or the STAR classification system
- ▶ Control any bleeding with gentle pressure and elevation if possible

# Wounds UK

## 2016 Events

[www.wounds-uk.com](http://www.wounds-uk.com)

**Eliminating Avoidable Pressure Ulcers (South)**  
20th October 2016,  
Bournemouth International Centre

**Scottish Wound Care Conference**  
8th September 2016,  
The Glasgow City Hotel  
(formerly Thistle), Glasgow

**Wounds UK Annual Conference**  
14th-16th November 2016,  
Harrogate International Centre

**FDUK Annual Conference**  
15th November 2016,  
Harrogate International Centre

**The Annual Conference of the Diabetic Foot Journal**  
6th October 2016,  
IBIS Hotel, London





- ▶ Remove necrotic tissue, surface bacteria and any foreign objects by gently irrigating with saline or warm tap water
- ▶ Where practical gently unfold the skin flap and bring the edges as close together as possible
- ▶ DO NOT pull the skin flap across in an attempt to join the edges since this may further disrupt the blood supply to the flap
- ▶ DO NOT pull or apply pressure to the flap since this trauma may further disrupt the blood supply
- ▶ DO NOT use wound closure strips. These have been found to cause new damage and slow down the healing process (NHS Education for Scotland, 2015)
- ▶ Measure and record the wound dimensions for the patient records

- ▶ If the flap is pale, dusky or darkened, reassess within 24/48 hours or at first dressing change (STAR)
- ▶ Assign the appropriate category to the skin tear based on the STAR 2010 guidelines
- ▶ Select an appropriate dressing and draw an arrow in ink on the dressing before it is applied. This will denote the direction the dressing will be removed; away from the attached skin flap to prevent further damage.

**Managing the skin tear**

Select an appropriate dressing and if there is a flap *in situ* draw an arrow in ink on the back of the dressing before application. In *Figure 1*, the arrow indicates the direction of removal, which should be from the

anchored edge of the flap to prevent lifting of the loose edge when removing the dressing.

**Dressings**

The ideal dressing should:

- ▶ Maintain a moist environment
- ▶ Be atraumatic on removal
- ▶ Protect the surrounding skin
- ▶ Manage the exudate
- ▶ Be comfortable to the patient
- ▶ Be easy to apply
- ▶ Be cost effective.

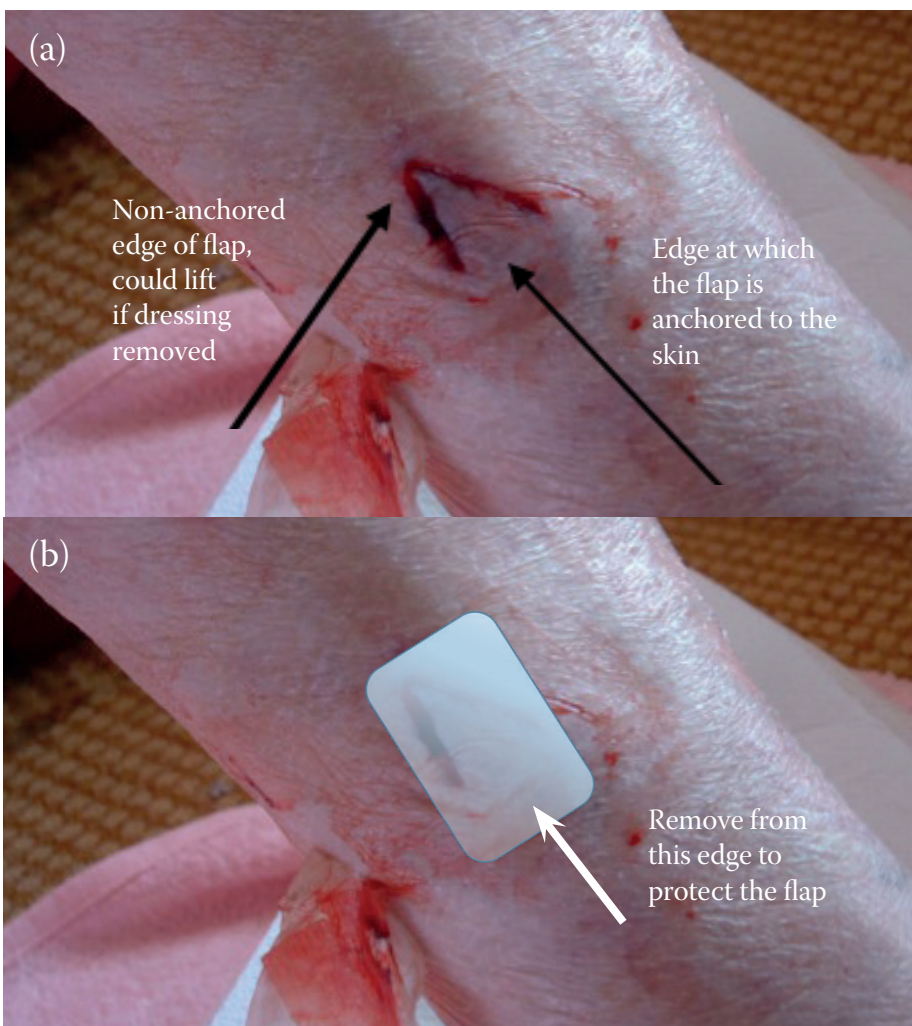
The specific dressing will depend on the current local formulary. Ideally it should be a dressing which can be left in place for several days to avoid disturbing the flap. Avoid adhesive dressings if possible depending on the site of the skin tear although if it is possible to leave the dressing in situ for 5–7 days, a transparent adhesive dressing such as the ultra thin hydrocolloids would be appropriate and these have the benefit of being waterproof allowing the patient to continue to shower or bathe (Stephen-Haynes et al, 2016).

A light retention bandage or tubular bandage could be considered to provide additional protection as long as it does not increase the risk of additional trauma.

An atraumatic contact dressing, soft silicone or silicone impregnated dressing will secure the flap yet be easily removed, but requires an additional absorbent layer and does not allow continuous visibility of the flap.

Absorbent clear acrylic dressings are semipermeable and can be left in place for up to 21 days. These have been found to be successful in treating skin tears with low to moderate exudate (LeBlanc et al, 2008).

Dressings may require to be changed more frequently if there



PHOTOS COURTESY OF JACQUI FLETCHER

**Figure 1.** (a) Showing the flap, caused by the patients nail while removing her tights; (b) Showing how the dressing should be marked.

are signs of high exudate or infection present.

Note that in the first few days following an injury, inflammation and redness are part of the normal healing response unless accompanied by a raised temperature, which would denote infection. Consider analgesia for the patient particularly prior to dressing changes.

All dressings should be removed gently and easily in the opposite direction of the skin tear to prevent further trauma. It is important, therefore, to indicate the direction of dressing removal on any opaque dressings. An arrow is drawn on the dressing to indicate the direction of removal (*Figure 1*). Adhesive removers may be used to minimise trauma on dressing removal.

For patients with lower-limb skin tears the limb should be fully assessed for vascular problems, if venous disease is present or suspected (following exclusion of arterial involvement by use of Doppler to perform an Ankle Brachial Pressure Index), compression should be initiated to maximise the healing potential.

### Referrals

Referral should be made to tissue viability services if:

- ▶▶ The skin tear becomes infected. This would be indicated by increased pain, exudate, odour, or oedema
- ▶▶ If an existing flap becomes non-viable, deteriorates, or requires debridement
- ▶▶ If there is delayed healing or wound breakdown.

### Conclusion

In healthy individuals, skin is strong, and able to repair itself. There are specific factors which make people more at risk of sustaining skin tears. An awareness of the risk factors and early identification of people at risk from skin tears, alongside small modifications to lifestyle and environment can significantly reduce the incidence of skin tears.

All nurses and healthcare professionals need to be competent in managing skin tears to prevent potential complications and ensure healing occurs and skin integrity re-established and maintained. **WE**

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