



SKIN TEARS SIMPLIFIED

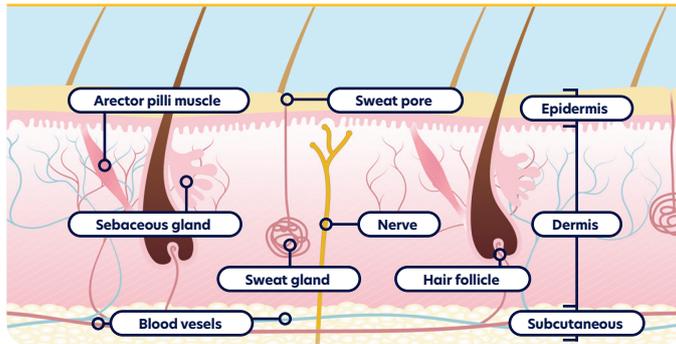
This Simplified Guide is intended to give you information about skin tears and answer some questions that you may have about their causes, classification, management and prevention.

Maintaining skin integrity can be challenging. Vulnerable skin can be defined as skin that is susceptible to damage as a result of a traumatic incident that would not normally damage the skin of a healthy individual (Meuleneire et al., 2013).

LEARNING OUTCOMES

- ✓ Understand the causes of skin tears
- ✓ Identify the risk factors
- ✓ Differentiate between the types of skin tears
- ✓ The importance of prevention
- ✓ How to manage a skin tear

LAYERS OF THE SKIN



Epidermis – the top layer of skin. It provides a protective barrier. The epidermis consists of four or five layers of epithelial cell, depending on its position on the body. It is a thin layer with the exception of the soles of the feet and palms of the hands.

Dermis - this lower layer sits beneath the epidermis. It contains collagen and elastic fibres that give strength to the skin. The dermis contains hair follicles, sweat glands, nerves, blood and lymph vessels.

Subcutaneous - this is the deeper layer and is made of fat that provides insulation and cushioning and connective tissue, which connects the skin to the underlying fascia of the bones and muscles.

DEFINITION OF A SKIN TEAR



A skin tear is a traumatic wound caused by mechanical forces, including removal of adhesives. Severity may vary by depth though not extending through the subcutaneous layer (ISTAP, 2018).

PREVALENCE AND INCIDENCE

Skin tears are frequently underreported or misdiagnosed. As a result, the full extent of the practical and financial burden on healthcare systems is not fully known. In addition, skin tears are often preventable wounds that create avoidable costs, particularly when classified as a complicated skin tear (LeBlanc et al., 2018).

The evidence for the prevalence of skin tears varies, but there is strong evidence to suggest they are more common than pressure injuries (Carville et al., 2014; LeBlanc et al., 2016).

Skin tears occur in individuals with fragile skin, commonly neonates and older people, which again are considered to be largely preventable. In neonates, the dermis is still developing and at full term, the skin is only 60% of adult thickness; neonatal skin is also less elastic and more likely to be

damaged by shear forces (Irving et al., 2006; Ewart, 2016).

Throughout the ageing process, the older person experiences thinning of the epidermis and a loss of collagen. This process instigates skin changes that make it more vulnerable to damage that includes skin tears (LeBlanc et al., 2018).

Other consequences of the changes seen in ageing skin are that skin wounds take longer to heal and are at an increased risk of subsequent deterioration (Moncrieff et al., 2015).

Older persons and neonates are not the only groups where skin tears occur. The critical or chronically ill person should also be considered as at risk (LeBlanc et al., 2013).

Skin tears can occur anywhere on the body with the most common areas being on the hands, arms and lower extremities, with up to 70–80% of skin tears occurring on the hands and arms (LeBlanc et al., 2018).

CAUSES OF SKIN TEARS

Skin tears occur due to shear and friction forces or blunt trauma, causing the epidermis to separate from the dermis or both to separate from underlying structures, and commonly occur on extremities (R. Ellis et al., 2015). Skin tears are often associated with falls, poor handling and equipment injuries. They are common in the elderly because of thinning skin, flattened ridges, loss of natural skin lubrication and increased capillary fragility (R. Ellis et al., 2015). There tends to be a change in the deposition of subcutaneous tissue in specific areas such as the face, dorsal aspect of the hand and skin (Le Blanc, 2018).

There are a variety of intrinsic and extrinsic causes of skin tears:

Intrinsic	Extrinsic
Age	Manual handling
Medication - poly pharma	Mechanical trauma - shear/friction/blunt
Comorbidities	Inadequate skin care
Mobility	Physical environment
Poor hydration/nutrition	Inappropriate clothing
Dry/fragile skin	Medical adhesives

(Stephen-Hayes, 2017; Idensohn, 2019)

CLASSIFICATION OF SKIN TEARS

Skin tears can be classified by the degree of severity and loss of the epidermal tissue using several systems, including the STAR and ISTAP classification systems.



The **STAR** acronym is a prompt to the appropriate assessment and treatment of skin tears.

- S**elect appropriate cleanser and cleanse wound
- T**issue alignment
- A**ssess and dress
- R**eview and reassess

(Stephen-Haynes and Carvill, 2011)

STAR CLASSIFICATION SYSTEM

Category 1	Category 2	Category 3
<p>Without tissue loss.</p> <p>A skin tear where the edges can be realigned to the normal anatomical position (without undue stretching) and the skin or flap colour is not pale, dusky or darkened.</p>	<p>Partial tissue loss.</p> <p>Scant = less than 25% of skin flap lost.</p> <p>Moderate = more than 25% of skin flap lost.</p>	<p>Full-thickness skin loss.</p> <p>The epidermal flap or tissue is absent in this type of skin tear.</p>

Skin Tear Audit Research (STAR)

ISTAP SKIN TEAR CLASSIFICATION SYSTEM

Type 1	Type 2	Type 3
<p>No skin loss</p> <p>Linear or flap tear which can be repositioned to cover the wound bed</p>	<p>Partial flap loss</p> <p>Partial flap loss which cannot be repositioned to cover the wound bed</p>	<p>Total flap loss</p> <p>Total flap loss exposing entire wound bed</p>

Le Blanc et al., 2013; ISTAP, 2022

DEFINITION OF A FLAP

"A flap in skin tears is defined as a portion of the skin (epidermis/dermis) that is unintentionally separated (partially or fully) from its original place due to shear, friction, and/or blunt force." - Van Tiggelen et al., 2020

MANAGEMENT OF SKIN TEARS

The standard practice in managing these wounds is to re-apply the tear, bringing the edges together to heal by primary intention. Starting the appropriate treatment as soon as possible assists with improving patient outcomes. Ideally, patients and caregivers should be educated to perform first aid when a skin tear occurs to preserve the viability of the skin flap where possible.

1 CONTROL BLEEDING

2 CLEAN WOUND

3 APPROXIMATE THE SKIN FLAP

4 WOUND ASSESSMENT/CATEGORISE SKIN TEAR

5 GOALS OF TREATMENT

6 DRESSING SELECTION

7 REVIEW & REASSESS

Adapted from Idensohn et al., 2019; ISTAP, 2018

1. Control bleeding (haemostasis)

- ▶ Apply pressure and elevate the limb. Haemostats may be used.

2. Clean the wound

- ▶ Carefully clean the wound with normal saline or recommended product (refer to local policy), and remove any residual debris.

3. Approximate the skin flap

- ▶ Carefully ease the flap back into place using a gloved finger, dampened cotton tip, tweezers or a silicone strip.

4. Wound assessment/categorise skin tear

- ▶ A holistic assessment of the patient and the wound, including medical history, comorbidities, skin conditions, past history of skin tears, mobility and history of falls.

- ▶ When looking at the wound and skin flap, consider the cause of the tear, its location, duration of the skin tear and viability of the flap. Use either STAR or ISTAP to categorise (check with local policy).

5. Goals of treatment

Treatment Goal		
Treat the cause	Implement prevention protocol	Moist wound healing
Avoid trauma	Protect periwound skin	Manage exudate
Pain control	Avoid infection	

6. Dressing selection

The ideal dressing for managing skin tears should:

- ▶ Control bleeding
- ▶ Be easy to apply and remove
- ▶ Reduce trauma on removal
- ▶ Provide a protective anti-shear barrier
- ▶ Be conformable and flexible and mould to contours
- ▶ Be cost-effective
- ▶ Provide secure but gentle retention
- ▶ Provide extended wear time
- ▶ Provide a moist wound healing environment

A non-adherent atraumatic contact dressing, soft silicone or silicone-impregnated dressing will secure the flap yet be easily removed, preventing further trauma. (Ewart, 2016).

Other dressings recommended by ISTAP include, where appropriate, foam, alginate, gelling fibre and hydrogel dressings (Idelsohn, 2019) - please refer to local policy.

The dressing can be marked with an arrow to indicate the correct direction of removal to prevent further trauma.

This must be clearly explained within the patient's notes to ensure continuity of care.



The following dressings are **not** recommended for the treatment of skin tears: iodine-based dressings, films/hydrocolloid dressings, gauze and skin closure strips e.g. steri-strips (LeBlanc, 2018; Idlesohn, 2019).

7. Review and reassess

- ▶ Monitor the wound for signs of infection. If there are no signs of infection or deterioration, leave the contact layer in place to avoid disturbing the flap.
- ▶ Monitor for any changes, considering the flap and surrounding skin. If the skin or flap is pale or dusky/darkened, reassessment should be made as soon as possible within 24-48 hours.
- ▶ If the wound does not progress or shows signs of deterioration, refer to an appropriate specialist (*please refer to local policy*).

PREVENTION OF SKIN TEARS

Early recognition of those at risk of skin tears is a vital part of prevention. A full skin assessment should be undertaken on admission or at the first visit to identify the risk factors (NHS Improvement, 2018). Following on from the assessment, ongoing skin inspections should be incorporated into the management plan of care e.g. aSSKINg (Assess Risk, Skin, Surface, Keep Moving, Incontinence, Nutrition, Giving Information).

ISTAP (LeBlanc et al., 2013, 2018) recommend a multidisciplinary team approach to the implementation of a systematic skin tear prevention programme.

This is based on three risk factor categories:

1. Skin
2. Mobility
3. General health (Ellis, 2015)

Risk factor	Patient	Health care professional/carer
Skin	<ul style="list-style-type: none"> ▶ Educate awareness of any medication that can induce skin fragility ▶ Wear clothing that will protect the skin e.g. long sleeves ▶ Keep skin moisturised ▶ Keep fingernails short 	<ul style="list-style-type: none"> ▶ Skin hygiene - use warm/tepid water with soap-less pH-neutral cleansers and moisturise skin ▶ Avoid strong adhesives, dressings, and tapes ▶ Avoid sharp fingernails/jewellery
Mobility	<ul style="list-style-type: none"> ▶ Where appropriate encourage active involvement ▶ Introduce an appropriate selection and use of assistive devices 	<ul style="list-style-type: none"> ▶ Daily skin assessment and monitor for skin tears ▶ Awareness of importance of safe patient handling ▶ Implement a fall prevention programme (including removal of obstacles, ensure good lighting) ▶ Pad equipment
General health	<ul style="list-style-type: none"> ▶ Where appropriate, educate the patient ▶ Discuss how best to improve nutrition and hydration 	<ul style="list-style-type: none"> ▶ Maintain a safe environment ▶ Education on protecting the patient from self-harm ▶ If there is evidence of the patient being under/overweight, refer to a dietician ▶ Recommend a review of any polypharmacy

Adapted from Idensohn et al., 2019; ISTAP, 2018

Emollient therapy (an ointment, cream or lotion that helps soothe, soften, and increase moisture levels), should be seen as a vital part of skin care in patients with aged skin. The use of emollients promotes general skin health, and twice-daily application has been proven to reduce the incidence of skin tears by 50% (Carville et al., 2014). Emollient products are available as moisturisers (creams, ointments and lotions), bath oils, gels and soap substitutes (NICE, 2015). Some emollients work by ‘trapping’ moisture into the skin and reducing water loss by evaporation. Emollients that include substances known as humectants (e.g. urea) work by actively drawing water from

the dermis to the epidermis and compensating for the reduced levels of natural moisturisers in the skin (Wounds UK, 2015).

Self-care, wherever possible, should be encouraged in suitable patients, and include emollient therapy, encouraging the patient to apply moisturisers themselves, where possible. This can be incorporated into the patient’s daily routine.

Patient awareness of skin tears and general skin health can be beneficial, encouraging the patient to monitor their skin for any changes. They can also be encouraged to be aware of potential risks and mindful of their environment, helping to avoid self-injury to fragile skin.

REFERENCES

Carville, K, Lewin, G, Newall, N, Haslehurst P, Santmaria, N, Roberts, P. (2007) STAR: A consensus of skin classification. *Primary Intention*.15 (1) 14-18

Carville K, Leslie G, Osseiran-Moissson R et al (2014) The effectiveness of a twice-daily skin-moisturising regimen for reducing the incidence of skin tears. *Int Wound J* 11: 446-53

Patticio Idensohn, Dimitri Beckman, Vera Lucia Conceição de Gouveia Santos, Heidi Hevia Campos, Diane Langemo, Kimberly LeBlanc, Mary Gloeckner, Kevin Woo, Samantha Holloway: Ten top tips: skin tears. *Wounds International* 2019 | Vol 10 Issue 2 | ©Wounds International 2019. www.woundsinternational.com

Le Blanc, K, Baranowski, S et al. (2013) International Skin Tear Advisory Panel: A Tool Kit to Aid in the Prevention, Assessment, and Treatment of Skin Tears Using a Simplified Classification System. *ADVANCES IN SKIN & WOUND CARE & VOL. 26 NO. 10*

LeBlanc, K, Baranowski, S. (2010) Skin tears: State of science: Consensus for the prevention, prediction, assessment and treatment of skin tears. *Advances in Skin Wound Care* 24(9) 206-211

LeBlanc K et al. (2018) Best practice recommendations for the prevention and management of skin tears in aged skin. *Wounds International* 2018. Available to download from www.woundsinternational.com

LeBlanc K, Baranowski S, Holloway S, Langemo D. Validation of a new classification system for skin tears. *Adv Skin Wound Care*. 2013 Jun;26(6):263-5

Lloyd-Jones, M. (2008) The prevention and management of skin tears. *British Journal of Health Care Assistants* 02:11

National Institute for Health and Clinical Excellence (2015) Tacrolimus and pimecrolimus for atopic eczema (TA82)

NHS Improvements 2018 – Pressure Ulcers: revised definition and measurements

Payne, RL, Martin, MG. (1999) Defining and classifying skin Tears: A need for a common Language. A critique and revision of the Payne and Martin classification System for Skin Tears. *Ostomy Wound Management*. 39 (5) 16-26

Rhian Ellis, Eleri Gittins: Guidance on management of skin tears. 2015 All Wales Tissue Viability Nurse Forum. *Wounds UK*, London. Web: www.wounds-uk.com

Stephen-Haynes, J. (2013) Skin Tears. An introduction to STAR. *Wound Essentials*. Vol 8 No 1

Stephen-Haynes, J, Carville, K (2011) Skin Tears Made Easy. *Wounds International*. London.

Wounds UK (2015) All Wales Guidance for the prevention and management of skin tears. Available online at: <http://www.welshwoundnetwork.org/>

Van Tiggele H, LeBlanc K, Campbell K, Woo K, Baranowski S, Chang YY, Dunk AM, Gloeckner M, Hevia H, Holloway S, Idensohn P, Karadag A, Koren E, Kottner J, Langemo D, Ousey K, Pokorna A, Romanelli M, Santos V, Smet S, Tariq G, Van den Bussche K, Van Hecke A, Verhaeghe S, Vuagnat H, Williams A, Beckman D. Standardizing the classification of skin tears: validity and reliability testing of the International Skin Tear Advisory Panel Classification System in 44 countries. *Br J Dermatol*. 2020 Jul;183(1):146-154

CONCLUSION

Having an awareness of the skin and the effects of the ageing process, can help clinicians in the prevention and management of skin tears. It is recognised that some skin tears may be unavoidable, but wherever possible, prevention should be the aim. This requires increased vigilance, awareness, health care professional education and encouraging self-care and awareness in all suitable patients, alongside engaging carers (LeBlanc, 2018).

When a skin tear does occur, product selection should take into account managing the wound appropriately, as well as avoiding further trauma to the skin. It is essential to take the potentially fragile surrounding skin into consideration in all decision-making processes.

The effect of a skin tear can be devastating and impact that person’s quality of life. Gaining knowledge of patients’ experiences and perspectives requires further research. Skin tears can cause pain, complications and delayed healing, and their prevention and appropriate management, where required, should be considered of paramount importance.



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Complexities of
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