


## NHS FORTH VALLEY

### Skin Tear Guidelines

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<b>Date of First Issue</b>	01/8/2020
<b>Approved</b>	01/08/2020
<b>Current Issue Date</b>	01/08/2020
<b>Review Date</b>	30/07/2024
<b>Version</b>	1 <sup>st</sup> Edition Version 1
<b>EQIA</b>	YES 16 <sup>th</sup> July 2020
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<b>Final Approval -</b>	

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<b>Content</b>	<b>Page</b>
1 Introduction.....	3
2 Scope .....	3
3 International Consensus.....	3
4 Prevalence of Skin Tears.....	4
5 Risk factors and Causes.....	4
6 Best Practice- Prevention of Skin Tears.....	5
7 Skin Tear risk Assessment Protocol.....	6
8 Identification, assessment and classification of skin tears.....	7
9 Classification.....	8
10 Management of Skin Tears.....	9
11 Conclusion.....	11
12 References.....	12

## INTRODUCTION

Skin tears are a significant problem for both patient and the health care professionals who treat them. They can be painful wounds, affecting quality of life & causing distress to the patient. Skin tears may increase the likely hood of hospitalisation and can prolong hospital admission time. Estimates or their prevalence differ around the world and across care areas, but there is a strong evidence to suggest that they actually occur more frequently than pressure injuries (**Carville et al 2014, LeBlanc et al 2016**)

## SCOPE

This guidance has been produced to support all registered nurses and Health Care Professional (HCP) within NHS Forth Valley (NHSFV) who may be involved in looking after patients with skin tears.

It outlines the process to ensure the up to date clinical evidence is practiced for optimum treatment of these wounds.

## INTERNATIONAL CONSENSUS

**The International Skin Tear Advisory Panel (ISTAP)** are a group of experts from around the world (Europe, North America, South America, Asia, Africa & Australia)who came together in November 2017 to implement universally accepted guidance on the prevention and management of skin tears.

### Definition

This panel have characterised a skin tear as a traumatic wound caused by mechanical forces, including removal of adhesives. Severity may vary by depth (not extending through the subcutaneous layer) (**ISTAP 2018**)

Skin tears are originally wounds generated by mechanical forces (friction, shearing or trauma) which cause the layers of the skin to separate. Skin tears can be partial thickness (the separation between epidermis & dermis) or full thickness (separation through the hypodermis to the fascia) and can occur anywhere on the body but more commonly on the hands, arm & lower extremities. (**Wounds International 2017**)

Skin tears most commonly occur at the extremes of age such as infants and the elderly. (**Serra et al 2018**)

Skin tears can be defined as either uncomplicated - where it is an acute wound and will go onto heal within 4 weeks or complicated - where the wound will not heal within 4 weeks thus becoming chronic (**ISTAP 2018**)

Prevention of skin tears where possible should be our priority. When skin tears occur, accurate assessment and appropriate management will minimise further trauma and preserve viable tissue.

Skin tears are an adverse event that should be reported whenever it compromises the safety of the patient, and in many countries skin tears must always be reported (**LeBlanc 2017**) (This does not apply in the UK)

## PREVALENCE OF SKIN TEARS

The scale of the problem – there is limited incidence of studies in the current literature on skin tears, and reported estimates vary. An early study suggested that more than million institutionalised adults develop a skin tear each year in the USA. **Malone et al 1991**

Estimates of skin tear prevalence vary across different care settings.

As skin tears are frequently underreported or misdiagnosed, the full extent of the practical and financial burden to healthcare systems is not known fully. In addition, skin tears are often preventable wounds that create avoidable costs, particularly when classified as a complicated skin tear, and/or in patients with multiple co morbidities. Collection of prevalence data is an area of key importance, which should be focused on for future study **Best Practice Document 2018**.

If we compare this to the prevention and management of pressure ulcers where there are well recognised best practice guidelines which incorporate risk assessment, classification and management strategies, it was clear that there was a need to offer practitioners better information on prevention and management of skin tears. ISTAP then developed a standardised classification on skin tears & produced guidance on the prevention and management of skin tears

### Age related skin changes associated with skin tears

The older population are at higher risks where aged skin becomes vulnerable, these individuals are more prone to developing infection and have co morbidities where skin tears could become a complex wounds, due to delayed healing. **Moncreiff et al 2015** suggested that skin and tissue ageing is associated with structural and functional changes, increasing susceptibility to skin tear development. In aged skin, wounds take longer to heal and are associated with increased risk for deterioration.

## RISK FACTORS AND CAUSES

**ISTAP Best Practice Document 2018** documented:

**Intrinsic risk factors** which are normal aging process are as follows:

- Thinning of the epidermis and flattening of the epidermal junction (this reduces the resistance to shearing forces)
- Loss of collagen, elastin and glycosaminoglycans
- Atrophy and contraction of the dermis causing the appearance of wrinkles and folds
- Decreased activity of sweat glands and sebaceous glands causing the skin to dry out
- Thinning of blood vessel walls and a reduction of blood supply to the extremities (capillaries become more fragile leading to ecchymosis and senile purpura)

Neonates & infants can be liable to skin tears as they have under developed skin **Baharestani 2007**

Increased dermal LEP (low-echogenic pixels), including solar elastosis, may represent a risk factor for skin tears (damage caused by the sun)

**Extrinsic risk factors** affect patients who require assistance with activities of daily living meaning they are at an increased risk from skin tears due to handling, force and trauma.

**Other factors to consider**

- Immunological status
- Malnutrition
- Circulation
- Oxygen levels/intake

**BEST PRACTICE: PREVENTION OF SKIN TEARS**

**ISTAP 2018** recommends an inter-disciplinary team approach to the implementation of a skin tear prevention programme.

This is based on three **risk factor** categories:

1. Skin
2. Mobility
3. General health

**Skin**

- History of previous skin tears
- Skin changes associated with ageing (skin atrophy, ecchymosis, senile purpura, haematoma, stellate pseudocarcinoma)
- Photo (sun) damage

**Mobility**

- Dependence for activities of daily living (including functional mobility)
- Impaired Mobility
- History of falls

**General health**

- Chronic disease/co-morbidities
- Impaired cognition
- Malnutrition
- Aggressive behavior

## **SKIN TEAR RISK ASSESSMENT PROTOCOL**

Early recognition of people who are at risk of developing skin tears is an essential part of prevention. A full holistic skin assessment should be conducted on admission to a care/clinical setting or first home visit (Wounds UK 2015).

If a patient has identified risk factors then it is recommended to implement a risk reduction programme check list as follows:

### **RISK FACTOR & ACTION**

#### **SKIN**

- Inspect skin and investigate previous history of skin tears
- If patient has dry, fragile skin assess risk of accidental trauma
- Manage dry skin & use emollient to rehydrate limbs as required (**Carville et al 2014**)
- Implement an individualised skin care plan using a skin friendly cleanser (not traditional soap which can dry skin) and warm water (not hot)
- Prevent skin trauma from adhesives, dressings and tapes – use silicone tape and retention bandages
- Consider medications that may directly affect the skin (e.g. topical & systemic steroids)
- Be aware of increased risk due to extremes of age)
- Discuss use of protective clothing (e.g. shin guards, long sleeves or retention bandages)
- Avoid sharp nails or jewellery in patient contact

#### **MOBILITY**

- Encourage active involvement/exercises if physical function is impaired
- Avoid friction and shearing (e.g. use glide sheets, hoists) using good manual handling techniques as per local guidelines
- Conduct falls risk assessment
- Ensure that sensible /comfortable shoes are worn
- Apply clothing & compression garments carefully
- Ensure a safe environment- adequate lighting, removing obstacles
- Assess for potential skin damage from pets

#### **GENERAL**

- Educate patient and carers on skin tear risks and prevention
- Actively involve the patient/carer in care decisions where appropriate
- Optimise nutrition and hydration, referring to dietician if necessary
- Refer to appropriate specialist if impaired sensory perception is problematic

(e.g. diabetes)

- Consider possible effects of medications and polypharmacy on the patient's skin

## IDENTIFICATION, ASSESSMENT AND CLASSIFICATION OF SKIN TEARS

### **ISTAP Best Practice Document 2018 has documented -**

When a patient presents with a skin tear, the initial assessment should include a full comprehensive assessment of the patient, the wound and mechanism of injury

The wound should be examined for the following factors and documented as part of a formal wound assessment

- Cause of wound
- Anatomical location and duration of injury
- Dimensions (length, wide, depth)
- Wound bed characteristics and percentage of viable /non viable tissue
- Types and amount of exudate (see Forth Valley exudate pathway)
- Presence of bleeding or haematoma
- Integrity of surrounding skin
- Signs and symptoms of infection
- Associated pain

Holistic assessment of patient is also vital, as their skin integrity and general health status are important to ongoing management. This should include factors such as:

- Patient's medical history
- Past history of skin tears
- General health & co morbidities
- Medication & polypharmacy issues
- Mental health issues
- Psychosocial & quality of life factors
- Mobility/dependence on assistance for daily living activities
- Nutrition & hydration

## CLASSIFICATION

ISTAP skin tear classification (see below) is a simple method of classifying skin tears, classifying them as either Type 1, Type 2 or Type 3. It is important to classify the type of skin tear to ensure the appropriate treatment.

NB ISTAP has replaced the previous STAR -**Skin Tear** Audit Research- classification system which had five categories (Carville et al, 2007).

# ISTAP Skin Tear Classification

Type 1: No Skin Loss



Linear or Flap Tear which can be repositioned to cover the wound bed

Type 2:  
Partial Flap Loss



Partial Flap loss which cannot be repositioned to cover the wound bed

Type 3:  
Total flap loss



Total Flap loss exposing entire wound bed

LeBlanc, K., Baranoski et al, J Advances in Skin and Wound Care June 2013



## MANAGEMENT OF SKIN TEARS

Skin tears are acute wounds that have the potential to be closed by primary intention. Traditionally, wounds closed by primary intention are secured with sutures, staples or adhesive strips; however, given the fragility of aged skin and the fact that skin tears are generally not deep, these are not viable options and other methods are required.



### ISTAP skin tear decision algorithm



- The main goal is to control any bleeding by applying pressure & elevate limb if required & if appropriate.
- Assess & categorise wound using ISTAP skin tear classification (as above)
- Clean / irrigate wound to remove any debris or any haematoma using either warmed saline or tap water
- Relocate skin flap back into place gently by gloved finger, a moistened cotton bud or tweezers, if flap is necrotic then this may require debridement but ensure healthy skin is left intact & friable skin is protected, if flap is problematic to realign then consider applying damp soft swabs to rehydrate area for 5-10 mins
- Avoid using adhesive strips, but may require sutures or staples depending on depth or wound (this is usually not recommended but maybe needed)
- Promote moist wound healing & manage exudate levels (see local exudate pathway)
- Observe for and manage any wound infection as per local policy
- Check that Tetanus status is up to date
- Optimum dressing for skin tear management should be simple to apply & removal, it should not cause any trauma when removing dressing and should help maintain a protective barrier, to encourage an optimum moist wound healing environment

**Dressing choices to consider are:**

- Soft silicone based mesh or silicone foam dressing - if possible dressings should be left in place for a few days to ensure flap is left undisturbed.
- The dressings should be marked with an arrow to illustrate the direction to remove dressing, this should also be clearly documented in notes. When removing dressing, this should be done slowly and gently to minimize any further trauma.



- Assessment of peripheral oedema, the risk can potentially cause a delay in wound healing

**(LeBlanc et al 2016)**

- Consider using soft protective bandages if the wound is on a lower limb, especially if oedema present.
- Compression therapy should be considered if the wound is on the lower leg and fails to respond within 2 – 4 weeks. Before applying compression, a full leg ulcer assessment should be carried out including ABPI ( see FV Leg Ulcer Guidelines 2019)
- Assessment of pain should be carried out and adequate analgesia to be given
- Initiate wound assessment chart
- Document in care plan
- Complete incident reporting documentation, as relevant to your area
- If relevant discuss with next of kin

You may need to refer to surgeons or plastic surgeons if the skin tear is extensive, if large haematoma has formed or uncontrollable bleeding occurs.

If leg wound fails to progress within 2-4 weeks, the Tissue Viability Service are available for support/advice. (Complete appropriate referral form).

## **CONCLUSION**

Skin tears are common wounds, particularly in extremes of age. Some may be unavoidable, but if staff are aware of the risk factors for patients sustaining a skin tear and implement prevention programmes, this can help minimise the incidence of avoidable skin tears.

By accurately identifying the classification the skin tear and being aware of the correct product selection to accurately manage the wound presentation this will help improve healing rates.

Treatment plans should reflect the best up to date available evidence.

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