### Guideline: The Management of People with Skin Tears and/or Pre-Tibial Injuries

#### Background
See “Guideline: The Assessment of People with Skin Tears and/or Pre-Tibial Injuries”

#### Indications
This guideline is intended to be used by health care providers, to guide their management of individuals with a skin tear and/or pre-tibial injury.

#### Guideline
1. Stop bleeding via the use of a calcium alginate dressing, direct pressure, elevation of the injury above the level of the heart (if feasible), rest of the affected area, and indirect application of ice, as needed.

#### Healed Wounds
2. If the wound is on a healing trajectory – based on the health care provider’s holistic assessment and clinical judgement – cleanse the wound with an appropriate wound cleansing solution using non-touch aseptic technique. Make sure to cleanse away any blood clots and debris from the wound surface.

**Note:** follow the manufacturer’s instructions when using a wound cleansing solution

3. If a viable skin flap is present, gently approximate the skin flap to the best of your ability (using sterile technique) and anchor it using adhesive strips or skin glue.

**Note:** due to the fragility of elderly skin, sutures and staples are not a viable option.

4. Debridement of loose, non-viable tissue in the wound should be performed by a trained health care provider who has the knowledge, skill, and competency to do so. Please refer to your respective college and employer’s policies and procedures before undertaking this task. For further guidance see “Guideline and Procedures: Wound Debridement” and “Guideline and Procedure: Conservative Sharp Wound Debridement”

**Note:** Update the primary health care provider regarding the wound to receive further direction about the need for a tetanus shot. If a tetanus shot is required, give it before the wound is debrided

5. Cleanse the wound again post debridement. Gently pat the wound dry with dry sterile gauze.

6. Choose an appropriate conventional moist wound dressing or combination of dressings, unless otherwise directed by a physician or nurse practitioner.

Consider choosing a dressing that will:

i. Promote an ideal moist wound healing environment

ii. Prevent wound bed cooling and disruption

iii. Prevent wound contamination

iv. Prevents strike through of exudates while wicking moisture away from the wound surface

v. Be cost effective

vi. Be comfortable to wear, not causing increased pain during wear time or on removal

vii. Specific dressings to consider:

1. A silicone-based mesh or foam dressing +/- a calcium alginate if bleeding is present
2. An absorbent clear acrylic dressing for low exudative wounds, which is to remain in place for an extended wear time – follow the manufacturer’s instructions
   viii. Avoid hydrocolloids, transparent film dressings, and paraffin gauze (tulle gauze) as these can cause disruption of the skin flap, skin stripping, and as they require more frequent dressing changes

7. Choose an appropriate dressing change frequency based on:
   i. Your wound assessment, including the patient’s risk for infection
   ii. Dressing products used and their ability to manage the exudate
   iii. The patient’s comfort and acceptability

8. If the wound is on the lower leg - Initiate compression therapy per the wound care specialist or prescriber’s orders

9. Dressing removal should be done away from the flap attachment site to preserve the flap and prevent further skin tearing. The direction of removal should be indicated on the dressing per the image below.

Not-Healing/Not-Healable Wounds

10. If it is determined that the wound in question is not-healing or not-healable due to intrinsic and/or extrinsic factors that are impeding healing (based off of the health care providers holistic assessment and clinical judgement) cleanse the wound with an appropriate wound cleansing solution and follow the manufacturer’s instructions. Make sure to cleanse away any blood clots and debris from the wound surface

11. If you have determined that the wound is not healing or not healable DO NOT DEBRIDE

12. Paint and/or cleanse (using sterile technique) the wound with an antiseptic and allow the antiseptic to air dry

13. Choose an appropriate non-adherent, dry, gauze based dressing or combination of, unless otherwise directed by a physician or nurse practitioner. **NOTE: the application of moisture retentive dressings in the context of ischemia and or dry gangrene can result in a serious life or limb threatening infection.**

14. Based on your assessment choose a dressing that will:
   i. Promote a dry wound environment
   ii. Minimize contamination
iii. Prevent strike through of exudates while wicking moisture away from the wound surface  
iv. Be cost effective  
v. Be comfortable to wear, not causing increased pain during wear time or on removal  

15. Choose an appropriate dressing change frequency based on:  
   i. Your wound assessment, including the patient’s risk for infection  
   ii. Dressing products used and their ability to manage the exudate  
   iii. The patient’s comfort and acceptability  

16. If the wound is on a leg with arterial insufficiency:  
   i. Advocate for a referral to a Vascular Surgeon to see if the problem with the arterial circulation can be surgically corrected  
   ii. Support the patient to eliminate restrictive clothing and to access a supervised exercise program as tolerated – you may need to request a referral to Physiotherapy  
   iii. Teach the patient to:  
       1. Protect their extremities from heat, cold, and trauma  
       2. Elevate the head of their bed 10-15cm to maintain lower limb position below the level of the heart for ischemic pain  
       3. Use a bed cradle to elevate bedding off their limbs, for pain management  
       4. Avoid constrictive activities, i.e. nicotine, caffeine, tight shoes/socks  

**Management Guidelines for ALL Skin Tears/Pre-Tibial Injuries**  

17. Treat the cause:  
   a. Modify any identified intrinsic, extrinsic, and iatrogenic factors affecting wound healing to promote the healing or stabilization if healing is not the goal, and to prevent complications  
   b. Implement preventative interventions such as: skin hygiene and hydration, responsible bathing, good nutrition, appropriate clothing, the removal of environmental risk factors, correct turning, positioning and transferring  

18. Patient centered concerns:  
   a. Manage pain through advocacy and collaboration with the patient and primary health care provider. Considerations may include encouraging the patient to take their pain medication prior to dressing change, non-pharmacological methods such as distraction/guided imagery.  
   b. Ensure the plan of care is created with input from the patient and/or their caregiver, including their concerns, motivations, abilities and preferences for treatment  

19. Infection control:  
   a. Teach that new onset or worsening pain may be a sign of infection and requires immediate medical attention
NOTE: Topical antimicrobials can be used to reduce bacterial burden in the presence of superficial wound infection, but never take the place of systemic antibiotics when those are needed for deeper infections

b. If you suspect a superficial or spreading infectious process update the primary care provider urgently

c. If you are not sure of the nature of the infection, choose a non-occlusive dressing as the secondary dressing.

d. Instruct the patient to attend their nearest urgent care or emergency department if there are signs of spreading infection, cellulitis, systemic involvement, or per your clinical judgement

e. Implement strategies to prevent infection, i.e. proper hand washing and infection control measures

20. Advocate for or request interdisciplinary referrals:

a. Wound Care Specialist for conservative sharp debridement, treatment planning, adjunct therapies

b. Physiotherapy: mobility/exercise plan, mobility/gait/range of motion assessment, adjunctive therapies for wound healing and/or neuropathic pain management

c. Occupational Therapist: assistive devices, modifications to activities of daily living, fall risk assessment and recommendations

d. Registered Dietician: diet, nutrition, supplementation, weight control

e. Speech Language Pathologist: presence or risk of developing a swallowing impairments

f. Social Work: psychosocial and economic/community supports

g. Vascular surgeon: vascular assessment +/- surgical correction

21. Education for the patient and/or support person(s):

a. Changing dressings as instructed, and keeping dressings clean and dry at all times

b. Quitting or reduce smoking

c. The importance of good nutrition and hydration

d. The importance of managing pain effectively

e. How to recognizing the signs and symptoms of infection/complications and when/how to seek IMMEDIATE help

f. How to protect their limbs from injury

g. Chronic diseases and how they affect the healing process and the importance of adhering to the treatment plan

h. The wound dressing technique if they or their caregiver are going to be changing dressings

22. If the patient has a skin tear or pre-tibial injury on their lower leg, educate the patient and/or support person(s):

a. Wash their legs and feet daily

b. Moisturize their dry skin daily (not between the toes), using non-scented, mild, pH balanced soap.
c. If the patient is wearing compression socks, have them apply moisturizers after the socks have been removed for the day

d. Exercising regularly to promote calf muscle pump function

e. Change their socks daily (no tight shoes or socks)

f. Protect their legs and feet from heat/cold/injury (no ice packs/heating pads)

g. Need for ongoing follow-up with a health care provider at regular intervals

h. Importance of professional foot care for those with arterial leg disease

i. Benefits of compression therapy and daily leg elevation and the need for lifelong compression (if this is part of their plan of care)

j. How to care for and apply/remove compression stockings, including the need to replace stockings every four - six months, if compression therapy is part of the patients plan of care

23. Provide resources/links to reinforce health teaching:

   a. SWRWCP’s “My Skin Tear” available at: https://srrwoundcareprogram.ca/Uploads/ContentDocuments/SWRWCP_SkinTEAR.pdf

24. Re-evaluate

   a. Regularly and consistently measure the wound, weekly at a minimum, using the same method

   b. Conduct a comprehensive reassessment to determine wound progress and the effectiveness of the treatment plan, i.e. Using the NPUAP PUSH Tool 3.0”, weekly at a minimum

   c. If the wound is not healing at an expected rate despite the implementation of best practice interventions, you need to:

      i. Update the primary care provider and wound care specialist

      ii. Re-evaluate plan of care and advocate for or request referrals

      iii. Discuss barriers or challenges with the patient

   d. Reassess pain at EVERY dressing change and more frequently as reported by the patient, using the same pain tool/scale each time. Report pain management issues to the patient’s primary care physician or primary care nurse practitioner

25. Notify the primary care physician or primary care nurse practitioner immediately if the following occur:

   a. Acute onset of pain or increasing pain

   b. Signs of localized and/or systemic infection develop

   c. Gangrene develops or worsens, rest pain develops in the foot, and/or previously palpable peripheral pulses are diminished or absent in the leg of a patient who has a skin tear on their lower leg or pre-tibial injury

26. Documentation:

   a. Document initial and ongoing assessments as per your organizations guidelines
Outcomes

1. Intended:
   a. The wound closes and drainage ceases. Expected rate of healing is a reduction of wound surface area by a minimum of 20-30% in 3-4 weeks
   b. The wound remains infection free
   c. The patient indicates that pain is resolved or manageable
   d. The patient understands their role in preventing further tissue damage and incorporates recommended activities and interventions to treat risk factors
   e. The patient can identify signs and symptoms of infection, and can describe how, when and whom to call when problems occur
   f. The patient becomes independent in self-management of their wound

2. Unintended:
   a. The wound does not close in a timely fashion
   b. The wound becomes infected
   c. The patient expresses concerns about poorly managed pain
   d. The patient does not understand and/or act on their role in preventing further tissue damage and do not incorporate recommended activities and interventions to treat risk factors
   e. The patient does not understand the signs and symptoms of infection/complications, and when, how and whom to seek help from
   f. The patient does not become independent in self-management of their wound

References