VANDERBILT 🦭 UNIVERSITY

MEDICAL CENTER

VANDERBILT 💱 UNIVERSITY

MEDICAL CENTER

Guideline: Friction Burn Management Guidelines

Revised Date: September 2022 Review Date: September 2024

Content Expert	s
-----------------------	---

Trauma PMG Reviewed by and adapted to Burn by: Anne Wagner, MD

Table of Contents

Indications:	2
Population:	2
Definitions:	2
Assessment:	2
Anesthesia:	2
Goal of Procedural Intervention:	3
Support wound bed healing and minimize scarring.	3
Procedure:	3
. Complications:	3
Special Considerations:	3
Reference	4
-	Definitions:

I. Indications:

Trauma patients admitted to a trauma service with road rash meeting inclusion criteria.

II. Population:

- A. Inclusion: Trauma patients admitted to a trauma service with road rash meeting exclusion criteria.
- B. Exclusion: Burn consult should be placed for these patients
 - 1. Friction burns with \geq 10% TBSA
 - 2.Full thickness friction burns with >5% TBSA
 - 3. Friction burns involving the hands, feet, face.
 - 4. Trauma *attending* discretion.
- C. Exemptions: Who should not get a burn consult.
 - 1. Trauma patients with soft tissue injuries and plastics following
 - 2. Any joint involvement with orthopedics following
- D. NOTE: if the patient is going to be discharged from the Emergency Department or if they are going to be admitted to a non-trauma service, a burn consult should be placed.

III. Definitions:

% TBSA: Percentage of a total body surface area of burn, as measured by rule of 9's or Lund-Browder.

IV. Assessment:

- A. Physical Exam: Full physical examination
- B. Documentation: Full physical examination detailing % TBSA, location of burns, and depth in admission or progress note.

V. Anesthesia:

A. None. It is imperative that a multi-modal approach should be taken to treat acute pain and procedural pain. It is recommended that the patient be started on a combination of acetaminophen, ibuprofen, gabapentin, oxycodone/dilaudid, ketorolac PRN if there are no contraindications. Ultimately, pain management will be at the discretion of the primary team.

VANDERBILT VUNIVERSITY

MEDICAL CENTER

VI. Goal of Procedural Intervention:

A. Support wound bed healing and minimize scarring.

VII. Procedure:

- A. Equipment:
 - 1. Nonsterile gloves
 - 2. Clean wash cloths
 - 3.4x4 kerlix fluffs
 - 4. Hibiclens or dial soap and clean water
 - 5. Wound care supplies (choose one option per specific wound care guidelines)
 - a. Bacitracin, xeroform gauze, kerlix gauze. Note: may substitute adaptic for xeroform if xeroform is not available
 - b. Saline, kerlix gauze, ABD pad (may use exu-dry pad)

B. Procedure:

- 1. Don personal protective equipment
- 2. Gentle cleansing of wounds with hibiclens or dial soap and water
- 3. Daily wound care (2 options)
 - a. For most road rash wounds, bacitracin and xeroform gauze are appropriate
 - b. For road rash wounds with tissue loss creating a cavity, use saline soaked kerlix followed by an ABDpad to create a wet-to-dry dressing.

VIII. Complications:

Infection, bleeding, poor wound healing, scarring, retained debris, decreased mobility, or diminished function.

IX. Special Considerations:

- A. Therapy Consults:
 - 1. <u>OT consults</u> should be placed for any patient with friction burns above the waist, including the face and upper extremities encourage mobility and stretching.
 - 2. <u>PT consults</u> should be placed for patients with friction burns of the lower extremities.
- B. Follow-up: All patients with friction burns should be scheduled in theburn clinic within 1 week of hospital discharge.

X. Reference

1. Agrawal A, Raibagkar S, Vora H. Friction Burns: Epidemiology and Prevention. Ann Burns Fire Disasters 2008 Mar 31;21(1):3-6

2. Al-Qattan, Al-Zahrani, Shanawani, Al-Arfaj.Friction burn injuries to the dorsum of the hand after car and industrial accidents:classification, management and functional recovery. J Burn Care Res Aug 2010;31(4):610-5

3. Brown D, Lu K, Chang K, Levin J, Schullz T, Goverman. A rare case of third degree friction burns and large case of Morel -Lavallee lesion of the abdominal wall. Burns and Trauma. Article number: 6(2018)

4. Han T, Han K, Kim J, Lee G, Choi J, et al. Pediatric hand injury induced by treadmill. Burns . 2005;31:906-