

Friction Burn (AKA Road Rash) Management

Friction burn: aka road rash: Skin abrasion and burn when the skin comes in contact with a hard object.

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I. Who gets a burn consult:

- A. Friction burns with >10% TBSA
- B. Full thickness friction burns with >5% TBSA
- C. Friction burns involving the hands, feet, face.
- D. Trauma *attending* discretion

II. Special Circumstances: Who should not get a burn consult?

- A. Trauma patients with soft tissue injuries and plastics following
- B. Any joint involvement with orthopedics following

III. Definitions:

- A. % TBSA: Percentage of 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. Universal Protocol (UP):

VI. Anesthesia:

None. Multimodal pain therapy is highly encouraged with acetaminophen, gabapentin, ibuprofen, oxycodone/dilaudid, ketorolac PRN if no contraindications

VII. Goal(s) of Procedural Intervention:

Improve wound healing and minimize scarring

VIII. Procedure:

- A. Equipment:
 - 1. Nonsterile gloves
 - 2. Clean wash cloths
 - 3. 4x4 kerlix fluffs
 - 4. Hibiclens or dial soap and water
 - 5. Wound care supplies (choose one option per specific wound care guidelines):
 - a. Bacitracin, xeroform gauze, kerlix gauze
 - b. Saline, kerlix gauze, abd. pad

B: Procedure:

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

IX. Complications:

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

X. Considerations:

- A. PT/OTs should be consulted on every road rash patient involving the face, extremities including the hands and feet to encourage mobility and stretching.
- B. Follow up: All patients with friction burns meeting consultation criteria should be scheduled in the burn clinic within following hospital discharge.

XI. References:

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-

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