RN Protocol: Wound Care

I. POLICY

A. Function: To facilitate and guide the Registered Nurse (RN) in the assessment and treatment of patients with traumatic wounds to the skin.

B. Circumstances under which the RN may perform the function:
   1. Setting: Outpatient clinics and triage and treatment area.
   2. Supervision: No direct supervision required.

II. PROTOCOL

A. Definition: This protocol covers the assessment and treatment of patients presenting with abrasions, avulsions, superficial lacerations, puncture wounds, and bite wounds (human or animal). Abrasions are shearing injuries that occur when skin is rubbed against a hard surface. Friction removes the epithelial layer resulting in exposure of the dermal layer of skin. Abrasions have the same physiological effect as a second-degree burn. An avulsion is an area of full-thickness tissue loss in which the skin is separated or peeled away from the underlying fat or anatomical structures such as muscle and bone. Superficial lacerations are open cuts involving the epidermis and dermis only. Puncture wounds are small external openings in the skin produced by penetrating intact skin with sharp or pointed objects.

B. Subjective:
   1. Chief complaint (document in the patient's own words).
   2. Description of the injury (what happened, where, when and how).
   3. Assess for pain and other associated injuries (e.g., fractures, dislocations).
   4. First aid rendered at the scene.
   5. Assess for chronic diseases that might affect wound healing (e.g., HIV infection, cancer, diabetes, peripheral vascular disease, alcoholic liver disease, bleeding tendencies).
   6. Allergies
   7. Current medications.
   8. Tetanus immunization status.

C. Objective:
   1. Observe, describe, and document the following:
      a. General appearance of the wound (note location, size, and depth).
      b. Active bleeding.
      c. Evidence of contamination.
      d. Degree of swelling and tenderness around wound.
      e. Presence of foreign body in wound.
      f. Circulation, sensation, and motion distal to injury.
      g. Range of motion and strength.

D. Assessment
- Risk for infection evidenced by/related to:
- Impaired skin integrity evidenced by/related to:

E. Plan

Recommended wound irrigation protocol: Use 500 – 1000 ml Sodium Chloride Irrigation Solution (0.9%) and a 50 ml syringe with a #20 gauge blunt needle to irrigate wounds.

Irrigate wound until clean and all foreign bodies removed.

1. **Abrasion**
   a. Apply 2% lidocaine gel or similar topical anesthetic to abrasion before cleansing to minimize pain if necessary.
   b. Cleanse abrasion with sterile 4 x 4 soaked in Sodium Chloride Irrigation Solution (0.9%).
   c. Apply thin layer of Bacitracin/Polymyxin topical ointment (antimicrobial ointment).
   d. Leave wound exposed to air.
   e. Administer tetanus prophylaxis per tetanus immunization guidelines if necessary.
   f. Teach patient how to apply antimicrobial ointment. Instruct the patient to keep wound clean and watch for signs of infection including redness, warmth, fever, swelling, drainage, and increased pain.
   g. Follow-up in clinic within three days if there is no improvement.

2. **Avulsion**
   a. Elevate affected area if possible and apply continuous pressure to control bleeding.
   b. Notify physician STAT.
   c. Prepare to transfer patient to outside facility or admit to a facility capable of providing a higher level of care.
   d. Once bleeding is controlled gently realign soft tissue to prevent further damage. Cover wound with saline-soaked gauze followed by dry sterile 4X4s.
   e. Keep patient NPO.
   f. Monitor and record vital signs and neurovascular status every 15 minutes.
   g. Administer tetanus prophylaxis per tetanus immunization guidelines if necessary.
   h. Fax a copy of the relevant progress notes, physician orders, and emergency care flow sheet to the receiving facility.
   i. Upon return to the institution follow-up with inmate in the clinic. Provide wound care as ordered by the physician. Instruct patient to keep dressing clean and dry, and watch for signs of infection including redness, warmth, fever, swelling, drainage, and increased pain.

3. **Superficial laceration / Small open wound**

   a. Place gauze sponge on the wound and apply continuous pressure to control bleeding.
   b. Irrigate laceration using Sodium Chloride Irrigation Solution (0.9%).
   c. Cleanse skin adjacent to wound with Chlorhexidine skin cleanser.
   d. If wound is clean and easily approximated, apply steri strips.
   e. Cover with dry sterile dressing.
   f. Administer tetanus prophylaxis per tetanus immunization guidelines if necessary.
   g. If the laceration is on extremity, instruct the patient to keep extremity elevated for 24 hours to reduce swelling.
   h. Instruct the patient to keep dressing clean and dry, and watch for signs of infection including redness, warmth, fever, swelling, drainage, and increased pain. If present, report symptoms to medical immediately.
   i. Advise the patient submit a Health Care Request form (CDC 7362) if wound has not improved in 72 hours.

4. **Puncture wound**
   a. Place gauze sponge on the wound and apply continuous pressure to control bleeding.
   b. Examine the wound and notify the physician if foreign bodies and/or debris are present. Remove any wood splinters before cleansing wound.
   c. Cleanse wound and skin adjacent to wound with Chlorhexidine skin cleanser.
   d. Administer tetanus prophylaxis per tetanus immunization guidelines if necessary.
   e. Discharge patient back to housing unit.
   h. Follow-up in RN clinic within three days and refer patient to a physician if indicated.

5. Refer the following wounds to the MD STAT:
   Bite wounds human or animal.
   Puncture wounds to the feet.
   Wounds containing foreign objects.
   Contaminated wounds.
   Lacerations involving the face, palms, soles of feet, joints, or genitals.
   Superficial lacerations more than 6 hours old.
   Deep lacerations.

   a. Cleanse skin adjacent to wound with Chlorhexidine skin cleanser.
   b. Refer patient to physician STAT
   c. Irrigate with Sodium Chloride Irrigation Solution (0.9%).
   d. Apply dry dressing pending physician evaluation and treatment.

F. Patient Education:
   1. Assess patient's potential for understanding the health information to be provided.
   2. Provide patient education consistent with the assessment of the condition.
   3. Document the education provided and the patient's level of understanding on the emergency care flow sheet.
   4. Refer patient to other resources as needed. Document all referrals on the emergency care flow sheet.
   5. Advise patient to utilize the urgent/emergent process to access medical care if signs and symptoms of infection develop.

G. Documentation:
   All information related to the patient's complaint shall be documented on the emergency care flow sheet. The flow sheet shall be filed in the patient's unit health record.

III. REQUIREMENTS FOR RN

A. Education/Training: The Registered Nurse shall attend an in-service on the assessment and treatment of patients with traumatic wounds to the skin and achieve a minimum score of 80% on the written posttest examination.
B. Experience: None.
C. Certification: None
D. Initial Evaluation: Initial competence will be validated onsite through simulated exercises, mock scenarios, and return demonstration. The Registered Nurse must satisfactorily demonstrate all critical behaviors identified on the Competence Validation Tool to be considered competent to perform standardized procedure functions.

   A written performance appraisal shall be performed by the Supervising Registered Nurse or designee six months after initial competence has been validated. Methods to evaluate performance shall include, but not be limited to direct observation, feedback from colleagues and physicians, and chart review.

E. Ongoing Evaluation: Ongoing competence will be validated annually using case study analysis, written examination, and return demonstrations where appropriate.

IV. REGISTERED NURSES AUTHORIZED TO PERFORM THIS PROCEDURE

A current list of all Registered Nurses authorized to perform this procedure shall be maintained on file in the Office of the Director of Nursing.

V. DEVELOPMENT AND APPROVAL OF THE STANDARDIZED PROCEDURE

This standardized procedure was developed and approved by authorized representatives of administration, medicine, and nursing. The procedure will be reviewed annually.

REVIEW DATE: _____ REVISION DATE: _____

THE STANDARDIZED PROCEDURE WAS APPROVED BY:

_____ DATE: _____
Chief Nurse Executive/Director of Nursing

_____ DATE: _____
Chief Medical Executive