BARNES-JEWISH HOSPITAL
ORGANIZATIONAL POLICIES/PROCEDURES

TITLE: Burn Wound and Skin Graft Care Guidelines

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Policy Statements

A. RNs with demonstrated competency provide burn wound care.
B. These guidelines are provided to assist staff in the care of the burn patient.
C. Wound care referrals will be obtained on all burn patients.
D. Burn wound dressings are changed daily unless otherwise ordered.
E. A nursing assessment and documentation will be done with each dressing change.
F. All burned and grafted areas should be elevated above the heart.
G. Strict adherence to Universal Standard Precautions (USP) regarding the handling of blood and body fluids is mandatory

Procedure

Equipment

4X4 gauze (preferably in tubs)
Normal Saline for irrigation
Wound cleanser
Burn roll gauze (4 inch or 9 inch as appropriate to wound size)
Stockinette dressing
Kerlix gauze roll (if using Acticoat®)
Mesh overlay dressing (Bandnet- if using Acticoat)
Basic Set
Prescribed topical antimicrobial agent (e.g. Silvadene, Acticoat, Sulfamylon)
Sterile water if using acticoat
Bandage scissors
Safety pins
Alcohol foam
Non-sterile gloves
Other dressings or topical agents as ordered by physician

A. Assessment
   1. Explain the procedure to the patient and family
   2. Patient's allergies
   3. Patient's ability to cooperate and tolerate dressing change (comfort needs, cognitive ability)
   4. Assess baseline data (VS, SpO2) as required by Sedation by Non-Anesthesia Personnel for Procedures policy if necessary
   5. Assess pain intensity, location & duration as well as effectiveness of interventions taken throughout the procedure
   6. Assess wound daily with dressing change and document appearance for color, size, odor, depth, drainage, bleeding, edema, cellulitis, epithelial budding, eschar separation, sensation, movement, peripheral pulses and any signs of pressure areas or skin breakdown.
B. Plan

1. Prepare equipment and patient. Gather necessary cleansing and wound care products
2. Explain procedure to patient/family
3. Involvement of other health care team members (Page physical therapy, occupational therapy, Burn team physicians and Wound Care nurse as involved)

C. Implementation
1. Maintain room temperature at 80° F, keep room door closed and minimize patient exposure throughout.
2. Pre-medicate the patient and re-medicate as needed.
3. Monitor as needed following the Sedation by Non-Anesthesia Personnel for Procedures policy
4. Perform hand hygiene and apply clean gloves, masks and hats for all caregivers in direct contact with patient during wound care.
5. Remove old dressings and discard in biohazard bag or container.
6. Remove gloves, perform hand hygiene andapply clean gloves.
7. Place clean pad or towel under burned extremities.
8. For bedridden patients or those unable to shower, clean the burn wounds with NS moistened 4X4 gauze sponges at the bedside.
9. For patients that can shower cleanse all burns with water and Betasept® on 4X4 gauze sponges and rinse well with water
10. Remove any debris, loose, non-viable tissue, and blisters. Forceps and scissors may be needed to assist in removing devitalized burned tissue.
11. Visualize and assess the cleansed, debrided wound.
12. Apply a thin layer of topical agent as ordered to open areas
    a. If using Acticoat® as the topical antimicrobial, wet product with sterile water and apply to open wound (either side of Acticoat® product may lie next to wound). Wrap with kerlix dampened with sterile water and secure with Bandnet or stockinette. Any areas dressed with Acticoat® are changed every 3 days, with kerlix changed as needed.
    b. Kerlix over Acticoat® must be kept moist, not soaked, with sterile water. This is usually necessary at a 2-3 hour interval.
    c. Change sterile water bottle every 24 hours and date bottle after opening
    d. Maintain dry linen under areas that are moist
13. Apply gauze layer (burn roll) over topical agent
14. Apply securing layer over gauze roll (stockinette)
15. Secure with safety pin
16. Facial Burns
    a. Minor facial burns should be cleaned as listed above. Apply Polysporin ointment and leave open to air.
    b. Full thickness burns to the face should be wrapped occlusively. Apply topical agent as ordered, gauze layer and stockinette. For full thickness wounds to the nose and ears apply Sulfamylon topical antimicrobial unless the patient is sulfa allergic
17. Post-operative graft care
    a. All areas that are not grafted or are not a donor site will receive pre-operative level of daily wound care as ordered
    b. Grafted areas should be splinted as ordered to protect new grafts, maintain posture, function, prevent contractures and reduce edema
    c. Verify order to change dressing to grafted areas
    d. For split thickness skin grafts (STSG), initial dressing change usually done at 72 hours post-op and then daily or as ordered.
        1. First post operative dressing change must be observed or completed by the Chief Resident or the Attending Physician
        2. Remove the outer dressings and expose the dressing layer next to the STSG.
        3. Examine grafts for adherence, color, odor and drainage.

4. If ordered, carefully remove the dressing over the grafts without traumatizing new grafts.
5. Remove gloves, perform hand hygiene and apply clean gloves.
6. Reapply topical agent and dressings as ordered.
7. Reapply necessary splints

e. Dressing change at Post-op day 5 or as ordered
1. Remove all dressings, including mesh-like conformant layer covering grafted areas carefully
2. Remove all staples as ordered. Clarify with MD if there is not a written order to remove staples
3. Resume preoperative level of activity and daily wound care as ordered.

18. Donor site care
a. Donor sites will be covered with Biobrane. Biobrane will be applied over the donor site and secured to surrounding non-burned skin or applied to itself for circumferential burns.
b. Apply a gentle gauze pressure dressing over the Biobrane and immobilize the area for 24-33 hours over flat areas. Areas over joints may take 48 hours to adhere.
c. Change outer gauze dressing as needed until plasma leak stops. Express fluid or bubbled areas under the Biobrane.

KEY POINT: Excess gauze or non-adherent dressings will delay drying and prolong healing. Limit the use of dressings over Biobrane after 24 hours.

d. When the Biobrane appears opaque and dry the edges will start to curl up. Trim edges as they pull away from the skin. If you encounter pain or bleeding, stop and wait several more days.
e. If the donor site has a dressing other than Biobrane please consult the postoperative orders for wound care.
f. Lotion may be applied to healed burn wounds as ordered.

D. Evaluation/Documentation
1. Patient's response or tolerance of procedure
2. Patient's understanding of procedure
3. Document medications given
4. Pain location, duration, intensity and interventions throughout procedure
5. Wound appearance in nursing assessment

E. Patient/Significant Other Teaching
1. Precautions
2. Signs and symptoms to report, i.e., signs of wound infection or decrease in functional ability
3. Reinforcement of teaching
4. Return demonstration of home wound care instructions

Resources/References

Lynn-McHale Wiegand & Carlson: AACN Procedure Manual for Critical Care., 6th ed Philadelphia: Saunders, 2011.

Wasiak J, Cleland H, Campbell F, Spinks A. Dressings for superficial and partial thickness burns. *Cochrane Database of Systematic Reviews* 2013, Issue 3.

Perry, Potter & Ostendorf: Clinical Nursing Skills & Techniques. 8th Ed St. Louis: Mosby, 2014.

Acticoat discharge teaching instructions-Located on the Patient Education Website under "Skin/Wound."

Approval

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