### POLICY

1. Care of the patient with a halo brace and jacket may be performed by the Registered Nurse (RN) or Licensed Practical Nurse (LPN) or by the Care Team Assistant (CTA) under the direction of the RN or LPN.

2. For patient safety and optimal outcomes, the practice guidelines and procedures are to be performed as written in the following sections.

### DEFINITIONS

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>Halo</td>
<td>A metal ring fixed with 4 pins [2 posterior and 2 anterior] onto the external bony table of the cranium.</td>
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<tr>
<td>Halo Vest</td>
<td>A plastic shell with padding fastened to the torso.</td>
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<td>Halo Brace</td>
<td>Includes the halo ring, vest and metal bars.</td>
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<td>Pin Sites</td>
<td>The area in which the skull pins penetrate the skin is the pin site.</td>
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### PRACTICE GUIDELINES

1. Assess halo pin sites BID, and cleanse BID or as ordered.
2. Inspect the skin below the vest BID and notify the physician of skin breakdown.
3. Inspect the Halo Ring and pins for loosening every shift.
4. Attach a wrench to the halo vest; know how to remove breastplate in an arrest situation.
5. Avoid using iodine solution on pin sites as it corrodes metal.
6. Avoid the use of ointments as they trap drainage and contribute to infection.
PROCEDURE

Equipment

- Halo Wrench attached to vest
- Normal saline
- Clean cotton tipped applicator or gauze - one for each pin site

1. Halo Pin Site Care:
   1.1. Explain the management of the halo brace to the patient and family.
   1.2. Inspect the pin sites twice a day for signs of infection (pain, redness, inflammation, and drainage). Report any changes to the physician.
   1.3. Check the pins on the halo ring to be sure they are secure. The screws should not be able to be moved with your fingers; if loose, contact the physician to tighten the screws.
   1.4. Cleanse the pin sites twice a day with normal saline
      1.4.1. Cleanse using a circular motion from the pin site outward to the skull.
      1.4.2. Use new cotton tipped applicator or gauze for each pin site.
      1.4.3. Inspect to ensure that no gauze strands or cotton wisps are left in the pin site to cause irritation or infection.
   1.5. Loosen any crusts around the pin sites with moist compresses.
      1.5.1. Wrap the pin site for 20 minutes with normal saline soaked gauze.
      1.5.2. Remove crust with the moistened gauze using a gentle rolling motion.
   1.6. Leave the pin site open to the air.
   1.7. Carefully trim the hair around the pin sites when needed to allow for inspection and to prevent infection.
   1.8. Do not unscrew any screws on the halo brace.

2. Skin Care Under Halo Vest:
   2.1. Ensure that the vest rests against the skin with no clothing underneath.
   2.2. Log roll turn the patient every two hours; do not use the halo bars on the vest to move the patient. Maintain body alignment.
   2.3. Encourage the patient and family to assist with vest care.
   2.4. Check the edges of the fiberglass vest for comfort and fit by inserting one finger between the vest and the patient’s skin.
      2.4.1. If the vest is too tight, skin breakdown, edema and possible nerve damage could occur.
      2.4.2. If the vest is too loose then it is not adequately supporting the patient.
2.4.2.1. Notify the physician in both cases, as adjustments to the vest are needed.

2.5. Inspect under the vest twice a day, and keep all areas of skin dry. If red areas are noted, notify the physician.

   Note: It is helpful to inspect the areas under the vest using a flashlight.

2.6. For patients with altered balance and sensation, bath in bed; do not shower.

   2.6.1. Wash under the vest with the patient lying down. Unbuckle one side at a time and clean. Dry the skin under the vest well and be sure to re-buckle in the same hole.

2.7. Once the patient has normal sensation and balance, and is participating in self-care activities, assist the patient to sit on a chair by the sink to complete care.

   2.7.1. Teach the patient to only loosen one side at a time and how to refasten the vest properly.

2.8. Do not use powders or creams.

3. Hair Washing

   3.1. Shampoo the patient's hair regularly.

   3.2. Place the patient supine in bed, placing a towel or plastic bag along the back and shoulders to protect the lining of the vest from getting wet.

   Note: The halo crown, bars, and pins can safely get wet.

   3.3. Remove the headboard and gently bring the patient's head out over the top of the mattress with shoulders remaining on mattress - the halo system supports the head and neck safely (North, North and Lee, 1992).

   3.4. Place a garbage can or bucket under the patient's head to catch the water.

   3.5. Wash the hair as per usual using caution when lathering and rinsing around pin sites to prevent loosening.

4. Vest Plate Removal for CPR

   4.1. Do not unscrew any screws on the halo vest unless in an arrest situation.

   4.2. Ensure a halo wrench is present (taped/velcro to vest) in the event of an emergency situation. (In the IMCU the halo wrench is at the patient bedside and in the ICU available on the crash cart). Once a patient is mobile, attach the wrench to the halo jacket with Velcro.

   4.3. Position the patient supine on the back plate of the halo vest.

   4.4. Use the back plate as the CPR board.

   4.5. Loosen the two bolts attaching the posts to the front portion of the vest. Loosen the waist belts and lift the front of the vest up to "Initiate CPR."

   4.6. Remove the front portion of the vest completely in order to perform CPR properly.
REFERENCES


RELATED DOCUMENTS

Brochures
WL85-0614 Your Halo Brace

Other
Quick Reference Guide – Halo Ring and Jacket Care

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