Device-Related Pressure Ulcer Prevention – Cervical Collar Recommendations and Guidance

These recommendations are intended to provide guidance to improve the consistency of pressure ulcer prevention related to devices across Minnesota hospitals and to address issues identified through the reporting of pressure ulcer events. The recommendations are not intended to address all clinical and regulatory requirements related to wound prevention and care.

I. Cervical Collar Order

- Obtain provider order for collar application which includes frequency of use, i.e. when collar needs to be worn; when it can be off.
- Orthotist, or other trained provider, is consulted for appropriate collar fit.

II. Decrease Prolonged Pressure

- Reduce time on backboard by removing patient from backboard on arrival in emergency department or as soon as possible.
- In an effort to reduce time in emergency/stabilizing collar consult with provider as soon as possible. The goal for definitive care, e.g. collar removal, change to longer-term collar, is within 24 hours or less.
- If the patient condition permits, inspect and clean the skin during change from transport collar to longer-term collar.

III. Cervical Collar Placement

- Maintain cervical spine alignment during cervical collar placement.
  - Patient should be lying in bed. Assistance from another staff member will be needed to maintain cervical alignment.
  - Request that the patient lie still, not moving the head, neck, shoulders or arms.
  - Place front of collar so chin rests fully on the ledge of the chin piece.
  - Log-roll the patient to the side, with one care giver immobilizing the head and neck.
o Second care giver will place back piece of collar on the neck, making sure the top of the collar edge is below the occiput.
o Log roll patient to their back.
o Connect the collar Velcro straps on both sides of the neck. Collar should fit snug, but not tight (the patient should not be able to move the chin off the shelf and inside the collar).

IV. **Neurological assessment**

- Conduct a neurological assessment after initial collar application, then every 8 hours (and as needed), or per provider orders.

V. **Skin and Collar Care**

- While stabilizing patient’s cervical area, remove cervical collar to cleanse, inspect and palpate skin every 8-12 hours and document removal of device and findings.
- Log-roll and reposition patient every 2 hours (and as needed).
- If collar has removable inner pads, change and wash pads every 24 hours (and as needed).

*Inspection and care:*

- Patient should be lying down. Assistance from another staff member will be needed to maintain cervical alignment.
- Remove anterior section of collar. Have second care giver maintain cervical alignment. Assess skin for areas of redness, rashes or skin breakdown. With darker pigmented skin, pressure damage often appears as skin that is darker in color. Pay special attention to chin, jaw, ears, shoulder and sternum.
- Cleanse face and neck with soap and water. If patient had a beard when fitted for the collar, don’t shave the beard. If not, shave facial hair as needed. Gently dry skin thoroughly.
- Avoid use of powders or lotions on the skin under collar.
- If collar has removable inner pads, remove them daily (and as needed) from the collar and attach clean pads. Make sure the pad covers the edges of the collar and no hard plastic edge comes in contact with the patient’s skin.
- Replace collar, making sure it is snug, but not tight.
  - Consider use of dressings such as InterDry Ag™, or thin dressings that do not alter the fit of the collar, to wick away moisture.
- Log-roll the patient on the side, maintaining cervical alignment. Remove the posterior section of the collar.
- Clean occipital area and skin under collar with soap and water.
- Inspect and palpate scalp for breakdown, paying special attention to the occipital area and ears.
○ Monitor for redness and/or boggy skin when palpating scalp and new onset of drainage. Look for matting of hair and remove if medically necessary and with approval of patient/family.
○ Gently dry skin.
○ Replace collar, making sure it is snug, but not tight.
○ If collar fit is in question or pressure injury occurs, consult with provider or orthotist.

VI. Patient/family education

• Prior to discharge, teach patient/family:
  ○ Wearing schedule
  ○ Application, wearing and removal of collar
  ○ Proper cervical alignment
  ○ Skin care and inspection
  ○ Collar pad cleaning

VII. Re-assessment to Assure Appropriately Sized Collar:

• If questions or concerns about collar fit, placement or care, consult orthotist or other trained provider.
  ○ Consult individual facility policies regarding follow-up orthotic consultations.

Instructions: Miami J Collar Placement:*

Link to Instructions: http://www.ossur.com/?PageID=13502

1. Patient lying down: Slide the Back carefully behind the patient’s neck. Make sure it is centered evenly.
2. Flare sides of the Front out, slide it up the chest wall and scoop it up under the chin.
3. Sides of the collar Front should be directed up toward the patient’s ears.
4. Bring the assist strap around the back of the neck and attach the white section loosely to the opposite side of the collar. Place the Back behind the patient’s neck. Make sure it is centered evenly. Attach the Back straps loosely to the Front.
5. Holding the Front securely, curl the ends snugly against the patient’s neck. Fasten the Velcro strap, and then secure the other side in the same way. Alternately tighten the straps, one at a time until they are in place. The Velcro straps must be aligned symmetrically and oriented “blue-on-blue” to the Velcro on the front.
6. A properly applied Miami J will look like the picture on the right.

*Consider use of Occian back as an adjunct to the Miami J Collar
Instructions: Aspen TX Collar Supine Sizing*

Link to Instructions:

- Maintain head in neutral or desired position according to hospital protocol and/or physician orders. Place arms down along side.
- After choosing the appropriate collar size, roll up back panel (like a hand towel), roll collar front panel sides inward and pre-flex thoracic extension
- Fold loop Velcro strap over foam pad.
- Place back panel under crevice of neck.
- Press down on the back panel with one hand and push with other until back panel is centered under neck.
- The end of each Velcro strap should come to same position on each side.
- Velcro straps should be centered between the ear and the top of the shoulder muscle.
- Flare sides of front panel outward.
- Place chin piece directly under chin
- Hold firmly with one hand, Push sides of front panel up over shoulder muscles and around neck.
- While holding collar front panel with one hand, center back panel and attach both sides to front.
- While positioning thumb firmly against lower corner of front panel side, undo Velcro with other hand by firmly gripping back panel Velcro strap. Pull straight out (laterally) until slack is removed.
- When reattaching back panel, make sure Velcro strap is attached high enough so that back panel plastic does not make contact with skin. If this is not possible.,
- Patient’s chin should be flush with end of collar chin piece.
- Inner trach bar should not be touching airway
- All slack should be removed from collar back. Back panel should be centered (from the front, the back Velcro straps should be symmetrical).

*Consider use of Occian back as an adjunct to the Aspen TX Collar
Instructions: Philadelphia Tracheotomy Collar


The two-piece design consists of a FRONT piece and a BACK piece which are packaged as a set.

1. After selecting the properly sized collar, apply the back piece of the collar to the back of the patient’s neck. Center the collar. The back arrow should point upward.
2. Apply the FRONT piece of the collar with the chin secured in the recess. Center the collar to secure neutral alignment. The front piece OVERLAPS the back piece to ensure effective immobilization and comfort. The front arrow should point upward.
3. With hook and loop fasteners, tighten the collar with a bilateral adjustment. This will secure the patient’s cervical region in neutral alignment.

REFERENCES:
Aspen Cervical Collar Patient Handbook
Winkley Orthotics