**PURPOSE:** To outline the steps necessary to perform a daily sterile dressing change for a ventricular assist device (VAD) exit site.

**SUPPORTIVE DATA**
Most ventricular assist devices have cannulae (tubes) or cables (drivelines) that pass through the skin. With some devices, drivelines connect implanted ventricular assist devices to external control units and power sources. With other devices, cannulae act as conduits for blood flowing from the heart, to external pumping chambers and back to the great vessels. Drivelines/cannulae are covered with a cloth-like material where they exit the skin. The material makes it possible for tissue to grow into the driveline/cannula. This tissue ingrowth effectively forms a tissue barrier around the driveline/cannula. Good tissue ingrowth and effective exit site care are necessary to prevent exit site infections.

**OUTCOME MEASURES**
Discharge Outcomes:
1. Exit site without Signs/Symptoms of infection, redness, drainage
2. Tissue ingrowth is apparent at driveline/cannula exit site

**ASSESSMENT**
1. Assess driveline/cannula exit site daily for S/S of infection, redness or drainage
2. Assess extent of tissue ingrowth into driveline/cannula

**SUPPLIES**
- Surgical masks (for patient and nurse)
- Blue surgical caps (for patient and nurse)
- Non-sterile gloves
- Sterile gloves
- Sterile Kerlix Super Sponges (3 packages of 5)
- Sterile Normal saline
- Chlorhexidine solution (brand names; Hibiclens, Betasept, Hibistat)
- Non-occlusive tape

**SPECIAL CONSIDERATIONS**
- In the early post-operative period, patients may require pain medication prior to dressing changes.
- Notify the VAD coordinator or Transplant Team if the exit site becomes red, painful, or develops drainage.
- Do not put ointments or creams on exit site unless instructed to do so by a physician.
- In the event of skin breakdown or infection at the exit site, the frequency and dressing change protocol may be altered.

**NOTE:** (*) These items require a physician’s order and may be modified by the MD to meet individual patient needs.
| DRESSING CHANGE PROCEDURE* | 1. Explain procedure to patient/family. Determine if pre-medication is needed.  
2. Wash hands  
3. Assemble supplies. Mark Sterile Saline and Chlorhexidine containers with the date they were opened. Discard after 7 days.  
4. Clean sterile dressing change area  
5. Put on non-sterile gloves, surgical mask and blue cap. Have patient put on surgical mask and blue cap.  
6. Prepare sterile supplies needed for dressing change:  
   a. Open 3 packages of sterile sponges  
   b. Pour Chlorhexidine solution in the corner of 1 package  
   c. Pour sterile normal saline into the second package  
   d. Keep third package dry  
7. Undo abdominal binding taking care to not pull on the driveline/cannula. (May cause tissue ingrowth to separate from the driveline/cannula.) Remove and discard drive-line dressing  
8. Wash hands  
9. Put on sterile gloves  
10. Perform dressing change procedure. (If a patient has multiple drivelines/cannulae, always start at the site furthest away, so as not to pass dirty sponges over sites that have already been cleaned.)  
   a. Cleanse around stoma with Chlorhexidine sponges. Do not use in or on stoma’s surface. Do not apply to driveline/cannula. (If driveline/cannula is very soiled it may be cleansed once a week with Chlorhexidine sponges.)  
   b. Rinse area with sterile saline sponges  
   c. Wipe area dry with one dry sponge  
   d. Wrap driveline/cannula with one sterile sponge. Use remaining dry sponges to cover.  
   e. Tape dressings around edges in non-occlusive manner. If skin is macerated or broken down due to frequent dressing changes, may apply Tegaderm to skin and attach tape to that. Or consider using Montgomery straps  
11. Replace abdominal binder |
| DOCUMENTATION | Document presence/absence of redness, drainage or S/S of infection at driveline/cannula exit site. |
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