Ventricular Assist Device (VAD) Exit Site Care Guidelines

I. STATEMENT OF PURPOSE
The Ventricular Assist Device (VAD) Exit Site Care Guidelines are intended to provide standardization and continuity of exit site care for patients post VAD implantation. These guidelines have been developed to improve patient outcomes by promotion of wound healing and prevention of complications (i.e. infections).

II. DEFINITIONS
Exit Site (also called Driveline Site; wound site): A permanent wound where a percutaneous lead exits the abdomen.

Percutaneous Lead (also called Perc Lead; Driveline): Connects the VAD pump to the controller.

III. SUPPLIES YOU WILL NEED:
1. Sterile gloves
2. 2 masks
3. 1 gown
4. 1 hat
5. 3 - 4x4 gauze
6. 2 to 4 Sterile Drain Sponges (adjust according to amount of drainage)
7. Sterile normal saline (orange lavage capsule)
8. Chlorhexidine solution (Hibiclens)
   **DO NOT USE any other solution or ointment unless directed by MD or VAD Coordinator
9. Foam (or silk) tape
10. Duoderm
11. Sterile towel

IV. PREPARATION OF THE PATIENT
Explain procedure to the patient prior to performing. Instruct patient on the placement of the mask, lying still and prevention of contamination of the sterile field.

V. PROCEDURE GUIDLINES:
The driveline exit site wound requires a minimum daily cleansing and a sterile dressing. It may be required for the driveline care to be done BID to QID basis depending on the amount of driveline drainage. The goal is to keep the driveline site dry and clean.

1. Wash hands and arms thoroughly with warm water and antimicrobial soap. Rinse well and dry completely.
   **Handwashing is the most effective way to help prevent the spread of organisms. (Hand Hygiene Policy)
   The antimicrobial soap kills the bacteria or suppresses their growth. Effective hand washing requires at least a 15 second scrub with soap and water; hands that are visibly soiled require a longer scrub. A thorough rinse with warm water washes the organisms and dirt down the sink. The alcohol based hand sanitizer can be used to cleanse prior to the procedure as long as your hands are not visibly soiled.
2. Apply mask, gown. If patient is not on ventilator, apply a mask to the patient also.
3. Unfasten the patient’s abdominal binder and leave in place under the patient.
4. Put on clean gloves and remove old dressing. Dispose of old dressing in an appropriate container.
5. Examine the appearance of the driveline site for any signs of infection or unusual drainage. The signs of infection to watch for are redness, swelling, change in drainage amount or color, fever, tenderness or warmth around the insertion site. Normal drainage will be clear (serous) in color and should not be yellow, green or white. If anything appears unusual, call MD or Nurse VAD Coordinator so that the appropriate intervention can be taken.
6. Assess the duoderm to make sure it is intact. It should be changed every 1-2 weeks unless loosening or causing skin irritation. Use four strips of duoderm to outline a square around the driveline exit site where the dressing tape can be applied. Keep duoderm approximately 2 inches away from drive line exit site.

7. Remove clean gloves and dispose of them in the garbage.

8. Wash off tabletop with alcohol or Virex and dry completely. Open sterile towel packaging to use as a barrier between the towel and the table. Partially unfold the sterile towel so that the edges lay within 1 inch of the boarder of the packaging. (Asepsis Technique : MLearning -0 NURS-10054)

9. Place these items on the Sterile Field:
   *When placing items on a sterile field, you should not touch the contents until you put on your sterile gloves.
   a. Open 4x4 gauze and place onto sterile field.
   b. Open Drain sponges and place onto sterile field

10. Apply Chlorhexidine solution to one 4x4 gauze. Replace the lid to chlorhexadine.

11. Apply Normal Saline to one 4x4 gauze.


13. Cleanse drive-line exit site using 4x4 gauze with chlorhexidine applied. Cleanse in a circular motion, starting at the exit site moving outward and then discard- 4x4 gauze. Remember to make only one circular motion per 4x4 gauze. Clean around the driveline edges without probing into the wound. Remember if you hold the driveline itself as you clean around it, that hand is considered non-sterile.

14. Wipe off chlorhexidine using the 4x4 gauze with normal saline applied using a circular, outward motion.

15. Blot dry gently with dry 4x4 gauze using a circular, outward motion.

16. Apply 2 to 4 drain sponges at driveline site. Cover sponges with tape, applying the tape to the duoderm so no tape is touching the patients’ skin. Date, time, and initial dressing change on dressing tape.

17. Reapply patient's abdominal binder.

18. Document time of dressing change and site appearance.

Instructions for Operating Room: Prior to patient leaving operating room, apply 2 to 4 drain sponges at the driveline site. Cover sponges with foam or silk tape. Date, time and initial dressing on dressing tape.

The initial duoderm placement around the driveline exit site will be placed at the first dressing change by the CVICU staff. An abdominal binder will be placed on the patient on admission to the CVICU.

VI. RESOURCES:

VI. REFERENCES:
