ORIGINAL DATE: 10/02
REVISED DATE: 07/07

SUBJECT: WOUND DRESSINGS: VACUUM ASSISTED CLOSURE (WOUND VAC) THERAPY

PURPOSE: To provide an outline of the steps taken by clinicians in changing a negative pressure wound dressing.

DEFINITION:

The VAC system is a wound dressing which facilitates removal of exudates, decreases infectious material, promotes circulation, promotes granulation tissue formation and ultimately facilitates wound healing.

Considerations

The VAC system is indicated for clean wounds of all types including Stage III and IV pressure ulcers, vascular wounds, neuropathic ulcers, dehisced surgical incisions, skin grafts and flaps. Contraindications include >20% non-viable tissue in the wound bed, unexplored or non-enteric fistulae, untreated osteomyelitis and malignancy in the wound. Use with caution in wounds with active bleeding, difficult hemostasis or for patients taking anticoagulants. The VAC may be used if patient has an enteric fistula following a wound consult by the wound care coordinator.

Supplies/Equipment

Clean gloves, wound cleansing or irrigation supplies; VAC dressing supplies; skin prep (optional); clean scissors; plastic bags for disposal of old dressing; clean towel to dry the skin after cleansing.

Procedure

1. A physician's order must be obtained for VAC therapy including the cleansing agent to be used, the frequency of VAC dressing change, the type of therapy (continuous or intermittent) and the mmHg that the VAC is to be set at. In most cases, VAC therapy will be ordered as continuous therapy, 125 mmHg, change M-W-F, unless the wound is infected and has not been treated with antibiotics (usually daily dressing changes are indicated in this case) or if the patient has had a skin graft or flap procedure (follow MD specific orders for VAC therapy in this case).

2. With the approval of the patient, clinicians (SN, PT/PTA, or OT) may change the VAC dressing using clean technique and standard precautions as follows.

3. Follow clean technique procedure for assessment and treatment of the patient including dressing change.

4. After turning off the VAC unit and clamping the tubing, carefully remove and discard old dressing. To facilitate removal of the sponge, gently irrigate or soak the sponge with normal saline or wound cleanser, if needed.

5. Make note of the amount of material removed from the wound for later documentation.

6. Cleanse or irrigate the wound according to the physician's order.

7. Dry the surrounding skin and assess the wound.

8. Apply skin sealant (Skin Prep is an example) to skin adjacent to the wound as needed to assure VAC seal and protect periwound tissue.

9. Cut VAC drape material and frame the wound with draping if periwound skin is fragile/friable. Multi layers of drape will decrease the moisture vapor transmission, which may increase the risk of maceration. Do not allow foam to overlap onto intact skin.

10. Cut the black or white sponge appropriate to the wound conditions to fit the wound bed including any areas of tunneling or undermining. Make sure all sponges are in contact with each other. Caution: Make sure all pieces are retrievable (i.e. – 1cm of length should be outside of a tunnel.)

11. Make note of the amount of sponge material inserted into the wound for later documentation.

12. A thin hydrocolloid may be used between skin and tubing to prevent pressure damage from the tubing. Position tube away from bony structures and rotate position of tube as needed with dressing changes.

13. Cut the drape to cover the wound and at least 1.5-2.5 inches of the periwound skin. To avoid trauma to the periwound skin, do not pull or stretch the drape over the foam drsg.

14. Apply the drape as smoothly as possible to cover the dressing and periwound area.

15. Cut a small hole in the VAC dressing and apply a Trac pad by removing backing and applying to the VAC dressing with the tubing lying over the hole. Once placed, remove hard plastic stabilizer by pulling up on the blue tab.

16. Install the canister into the VAC unit if it is a new set-up or drainage indicates the need for a change. The canister is to be changed every week and as needed when full. Connect the VAC dressing tube to the canister.

17. Open clamps and turn the VAC unit on.

18. Verify that a vacuum seal achieved by observing the collapsing of the sponge dressing and noting that the ordered mmHg pressure on the VAC unit has been achieved.

19. If a seal has not been achieved, add an additional drape to seal the leaks.

20. If an alarm/leak situation is unable to be resolved, call a wound team member for assistance. KCI may also be contacted directly for telephone assistance to resolve the issue.

21. Document findings and update the plan of care as necessary. Documentation must include the type of VAC foam used and the number of pieces removed as well as number of pieces placed in/on the wound.

22. Provide follow-up: Change dressing according to physicians order and obtain an alternate dressing order from the physician to cover instances in which VAC therapy needs to be interrupted (i.e. – when a patient needs to go out for a physician appointment and will not be taking the VAC with them or when an alarm situation cannot be resolved.)

Reference(s):

1. V.A.C. Therapy Clinical Guidelines. A Reference Source for Clinicians, DECEMBER 2006

Approved Policy Committee 09/13/05
Approved Policy Committee 07/10/07