POLICY

The physician orders V.A.C.® Therapy and directs wound care as per policy and product guidelines. Registered Nurses (RN) with additional training initiate V.A.C.® Therapy dressing and perform dressing changes. RNs assist with V.A.C.® Therapy dressing change and monitor therapy.

Applicability: V.A.C.® Therapy occurs in the Acute Perinatal Program.

PROCEDURE

Classification: Negative Pressure Wound Therapy – V.A.C.® Therapy is a non-invasive therapy using localized negative pressure and moist wound healing to promote wound closure

Indications:
- Surgical dehisced wounds with large deficits
- Highly exudative wounds
- Infected wounds
- Used with caution in patients receiving anticoagulant therapy, with active bleeding

Contraindications:
- Necrotic tissue with eschar present
- Non-enteric and unexplored fistulas
- Do not place V.A.C.® Dressing over exposed blood vessels or organs

Action:
- Removes interstitial fluid reducing edema, which facilitates an increase in the local blood supply
- Assists in decreasing bacterial colonization
- Enhances granulation tissue formation and epithelial cell migration

Physician’s order:
- Pressure setting – 125 mmHg continuous pressure
- Dressing change per policy
- Analgesia for dressing change, including the use of nitrous oxide/oxygen (Entonox) as needed
- Local anesthesia instilled into dressing side of tube 30 minutes before dressing change, as needed
  - Lidocaine 1% without epinephrine 20 milliliters (mL), mix with 40 mL normal saline

Gather Materials:

NPWT machine rental from KCI
- 1-800-668-5403, follow the prompt
  - Account # 28150
  - Ask for Infvac unit delivery to unit
  - Purchase order # 0200105769 and quote the unit
  - Record confirmation # on Wound Care Plan
  - Usually requires one day to plan the VAC dressing
  - Blue pads
  - Dressing tray
  - Intravenous (IV) catheter #16 or 18 gauge or feeding tube Fr #5
  - Sterile gauzes, 2x2, 4x4
  - Sterile gloves
  - Sterile Q-tips
  - Sterile saline warmed
  - Syringe 60 cc (mL)

Stocked in Balsam treatment room with wound care cart
- Simplace foam – medium
- Black foam should always be inserted with an interface such as Mepitel
- White foam does not need interface, works well for sinuses. Healing tends to be slower because it is more dense
- Infvac canister wound therapy with gel, People Soft # 00027904 (only the canister is available from Stores)
- No Sting Barrier film (Cavilon™)
- Sterile scissors, large
### Preparation

<table>
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<tr>
<th>Notes</th>
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<tbody>
<tr>
<td>Check woman has adequate pain relief</td>
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### Product/Dressing Application

<table>
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<tr>
<th>Notes</th>
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<tbody>
<tr>
<td>Dressing application by RN with additional training</td>
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<tr>
<td>RN assists with the V.A.C. ® dressing change</td>
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<tr>
<td>Keep extra drape in woman’s room</td>
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### Assessment of Dressing

<table>
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<tr>
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<tbody>
<tr>
<td>Visually assess V.A.C. ® dressing every 2 hours while woman is awake</td>
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<tr>
<td>Ensure the VAC unit is plugged in when the woman is not ambulating</td>
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<tr>
<td>Check the battery level when the unit is not plugged in</td>
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<tr>
<td>Ensure the foam collapses to a prune-like appearance</td>
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<tr>
<td>Check unit leak rate green bar on the screen, should be below the red line</td>
</tr>
<tr>
<td>If the screen indicates a leak (or bar is above the red line) and alarms do the following:</td>
</tr>
<tr>
<td>Check for loose connection between the two tubings</td>
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<tr>
<td>Make sure the clamps are open</td>
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<tr>
<td>The tubing is not kinked</td>
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<tr>
<td>Identify air leaks by listening with a stethoscope or moving your hand around the edges of the dressing while applying light pressure</td>
</tr>
<tr>
<td>If you find the seal is broken and the transparent dressing (e.g. drape) has come loose:</td>
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<tr>
<td>Patch with strips of adhesive drape as needed. Extra pieces of drape are in the package of new dressing.</td>
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<tr>
<td>If the above is not working call technical support: 1-800-668-5403 and follow the prompts</td>
</tr>
<tr>
<td>Assess drainage from the wound.</td>
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<tr>
<td>If rapid frank bleeding is noted in the tubing, turn the V.A.C. ® therapy off and Notify the physician immediately</td>
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<tr>
<td>This may indicate an intolerance to the pressure therapy</td>
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<tr>
<td>Assess woman’s comfort using the pain scale.</td>
</tr>
<tr>
<td>If she reports severe pain not relieved by routine analgesia, turn V.A.C. ® therapy off and Notify the physician immediately</td>
</tr>
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<td>This may indicate an intolerance to the pressure therapy</td>
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</table>
### Changing the canister

**RN changes canister as needed**
- The canister should be changed when full, as indicated by system alarm

**Close the clamps on both the canister and dressing tubing**
- Disconnect the canister tubing from the dressing tubing, protect dressing tubing with sterile 4x4 to avoid contamination
- Connect the new canister tubing to the dressing tubing
- Remove the canister from the unit and replace with new canister
- Ensure clamp on each tubing is open

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<tr>
<th>Notes</th>
<th>Canister should be changed with every dressing to control odour</th>
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<tr>
<td></td>
<td>Take precautions to avoid BBF exposure</td>
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<td></td>
<td>Dispose of the canister in biohazard bin in dirty utility room</td>
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</table>

### Removal of V.A.C® Dressing

**Check woman has adequate pain relief**
- Raise the tubing connections above the level of the therapy unit
- Close clamp on the dressing tubing
- Separate canister tubing and dressing tubing by disconnecting the connector
- Allow the therapy unit to pull the exudate in the canister tubing into the canister then close the clamp on the canister tubing

**Press THERAPY ON/OFF to deactivate the V.A.C® Therapy TM unit**
- Prepare 10 – 30 mL of sterile normal saline. Unclamp dressing tubing. Introduce saline into the dressing
- Wait for 15 -30 minutes to allow for the foam to decompress. Gently stretch the drape horizontally and slowly pull up from the skin. Do not peel.

Gently remove foam from the wound.

**Provide analgesia**

Pre-soak dressing to loosen the foam from wound bed OR
- If removal of foam is painful, obtain a physician order for 20 mL lidocaine 1% without epinephrine in 40 mL warmed sterile normal saline mixture in 60 cc syringe. Instill into dressing tubing 30 minutes prior to removal.
- If foam adheres to the wound bed, consider simultaneous saline irrigation.

Document wound assessments and dressing changes on the Wound Care Record.

### Discharge planning

**Referral to Home Care for V.A.C® Therapy**
- Discontinue V.A.C. ® Therapy on the day of woman’s discharged.
- Pack wound with appropriate wound care product according to wound care policy.

**Call KCI to return rental unit as soon as V.A.C® Therapy is discontinued**
- Rental confirmation # recorded in Wound Care Plan for Dressing

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<tr>
<th>Notes</th>
<th>Home Care prefers to initiate the V.A.C® Therapy in the community</th>
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<td>Rental units are provided in the community, the cost is covered by Medical Services Plan</td>
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<td>A daily rental fee is charged to BCW hospital while an inpatient.</td>
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Document wound assessments and dressing removal on the Wound Care Record.
DOCUMENTATION

- Interprofessional Progress Notes
- Postpartum Clinical Path
- Wound Care Record
- Wound Care Plan

REFERENCES


V.A.C ® Therapy Clinical Guidelines A Reference Source for Clinicians (2010). KCI Medical Canada, Mississauga ON.