Developed by the BC Provincial Nursing Skin and Wound Committee in collaboration with Wound Clinicians from:

Title	**Procedure: Wound Packing**
Practice Level	• Nurses in accordance with health authority/agency policy.

Background	• The purpose of packing a wound is to:
	  • Loosely fill dead space(s).
	  • Facilitate the removal of exudate and debris.
	  • Encourage the growth of granulation tissue from the base of the wound to prevent premature closure and abscess formation.
	• The type of packing chosen is dependent upon the wound assessment, goal of care and wound care management goals.
	• Packing materials (e.g., contact layer, sheets, ribbon and/or rope) should loosely fill the dead space and be conformable to the base and sides of the wound. Packing materials may include any of the following:
	  • Gauze, which may be dry or moistened with normal saline (NS), ointment or hydrogel.
	  • Impregnated ribbon dressings.
	  • Hydrofiber dressings.
	  • Alginate dressings.
	  • Antimicrobial dressings
	  • Negative wound pressure therapy (NPWT) foam and gauze dressings.
	  • Contact layer used to protect the wound surface.
	• When packing a dead space it is important to use only one piece of packing whenever possible to avoid a piece of packing being left in the wound. Packing left in the wound can lead to infection and impaired wound healing.
	• **For any cavity, undermining, sinus tract or tunnel with a depth greater than 1cm (>1cm), count and document the number of packing pieces removed from the wound, and the number of packing pieces inserted into the wound.**

Indications / Precautions/ Contra indications	**Indications for wound packing** • Done in conjunction with the Wound Cleansing procedure for cavity wounds or wounds with a sinus, tunnel and/or undermining with known endpoints. **Precautions to be considered when packing a wound** • Do not pack a wound if the sterile 15cm (6 inch) cotton tip applicator or probe does not reach the base of the undermining, sinus tract or tunnel; refer to the Physician/Nurse Practitioner (NP) and inform the Wound Clinician. Further investigation may be required to assess the true depth of the undermining or determine if the sinus tract or tunnel extends into a body organ or space (e.g., fistulas). **Contraindications for wound packing** • **Do not pack undermining, sinus tracts or tunnels that extend beyond 15cm (6 inches) or have an unknown end point unless directed by Physician/NP or Wound Clinician.** The length of a cotton-tipped applicator or metal probe is 15cm (6 inches). Do not use this procedure for fistula management; collaborate with a Physician/NP.
Bookmarks	

	Documentation Definitions References/Bibliography Document Creation/Revision
Related Documents on CLWK.ca	E-Learning Module: Wound Packing Guideline: Wound Bed Preparation Guideline: Assessment, Prevention & Treatment of a Wound Infection Procedure: Wound Cleansing Product Information Sheets

Equipment and Supplies

- Depending upon which aseptic technique being used:
  - Two (2) pair of clean gloves if using no-touch or clean technique; if taking photos then bring a third set of clean gloves.
  - One (1) pair each of clean and sterile gloves if using sterile technique; if taking photos then bring a third set of clean gloves.
  - Sterile dressing tray.
- For cleansing/irrigating the wound:
  - At least 100ml of the following wound cleansing solutions:
    - NS in a squeezable container designated for wound cleansing, or a pourable container.
    - Sterile water in a squeezable container designated for wound cleansing, or a pourable container.
    - Potable tap water, if approved for use within the agency.
    - Topical antiseptic solution on the recommendation of a Physician/NP or Wound Clinician.
  - If using a pourable container of NS or sterile water, use a sterile 30cc or 35cc syringe and a sterile wound irrigation tip catheter; if irrigation tip catheter is not available use an 18-19 gauge catheter device.
  - Commercial wound cleanser, if approved for use within the agency, but only for a visible wound bed
  - Disposable procedural pad and a kidney basin to collect fluid
  - If required, personal protective equipment (PPE) (e.g., apron, gown, eye protection, face shield).
- For doing the wound assessment:
  - Sterile 15cm (6 inches) metal probe (preferable) or sterile cotton tipped applicator.
  - Wound measurement guide.
  - Camera (as per agency policy).
- For packing the cavity, undermining, sinus or tunnel:
  - Sterile or clean cotton tipped applicator or sterile metal probe.
  - Appropriate packing material.
  - Sterile scissors.
  - Adhesive strip e.g., sterile steri-strips or paper tape to secure a packing ‘tail’, if required.
  - Appropriate skin barrier/protectant.
  - Appropriate cover dressing.
  - Permanent marker/ballpoint pen to note the number of packing pieces on the cover dressing (marker/pen to be left in the client’s dressing bag)
- For saving unused dressing pieces (see Wound Infection Guideline)
  - New C&S container or a new re-sealable plastic food storage bag (e.g., Ziploc).

Procedure

Steps	Key Points
Preparation and Setup	
1. Prior to changing the dressing, check the care plan to confirm the status of the wound, the aseptic technique recommended and the amount and type of packing used for the last dressing change.	It is important to know if more than one piece of packing material was used to ensure that all packing material is removed prior to cleansing and re packing the wound.
2. Assess for the presence of pain or a history of pain with wound packing and pre-medicate if necessary.	
3. Check the dressing supplies available at the bedside/treatment room or in the home. Appropriately saved dressing pieces may be used if within 2 weeks of the date on the container/plastic storage bag (e.g., Ziploc bag). Gather all other additional supplies that are required.	Take only necessary dressing change supplies to the bedside or into the home - all supplies taken to the bedside or home cannot be returned to the dressing supply and must be discarded if not used. Saved dressing pieces must be discarded 2 weeks after date noted on the resealable plastic container/plastic food storage bag.
4. Ensure the cleansing solution is at least room temperature (20^0 C).	Using a cool or cold cleansing solution can lower the wound temperature delaying healing and causing discomfort for the client.
5. Prepare and cleanse a work surface.	
6. Perform hand hygiene.	Follow agency policy and guidelines for hand hygiene.
7. Position the client. If needed, position disposable pad and kidney basin to catch the cleansing solution.	Although wearing clean gloves, only sterile equipment and supplies come in contact with the wound if using no-touch technique.
8. Perform hand hygiene.	Follow agency policy/guidelines for hand hygiene.
9. Set up the dressing tray using the appropriate aseptic technique.	The decision regarding aseptic technique (sterile, no-touch or clean technique) is based on the client's clinical condition, the type of wound, goal of care, dressing procedure and agency policy.
10. If required, put on personal protective equipment as per agency policy.	Using fluid under pressure can cause splash back.
11. Put on clean gloves.	
Removing the Old Packing	
12. Remove the cover dressing. Using forceps or sterile gauze, gently remove the packing from the wound. If packing material adheres to the wound, soak the packing with sterile normal saline or sterile water before removing.	Removing packing that adheres to the wound bed without soaking can cause trauma to the wound bed tissue. If packing material cannot be removed, contact the Physician/NP or wound clinician. If packing adheres to the wound, reassess the amount of wound exudate and consider a different packing material.

Steps	Key Points
Removing the old Packing con't	
13. Confirm that the type and quantity of removed packing corresponds to that documented for the previous dressing change.	**All packing materials MUST be removed with each dressing change**. If there is a concern that packing material has been left in the wound, contact the Physician/NP or Wound Clinician for further investigation.
14. Remove gloves and perform hand hygiene.	
15. Put on new clean gloves.	
Cleansing the Wound & Assessing for Insertion of New Packing	
16. Cleanse the wound bed and the peri-wound skin (see Wound Cleansing DST).	Cleansing removes unwanted exudate and debris from the wound. This promotes healing and may reduce wound pain, especially for wounds with a large amount of accumulated exudate and debris.
17. Assess the wound: • Use a measurement guide and sterile probe or sterile moistened cotton tipped applicator to measure the depth and determine the direction of cavity wounds, undermining, sinuses and tunnels. • Assess the wound bed, odour, wound edge, and periwound skin. • Note the amount and characteristics of exudate on the removed packing. Based on the assessment, consider if the current packing is still appropriate and if not, choose another packing material. • Assess for sign and symptoms (S&S) of wound infection. • Assess the client for level of wound pain before, during and after the packing activity.	Measuring the area to be packed helps the nurse to determine the amount of packing needed and if the area is healing. Moistening the cotton tip applicator reduces or eliminates loose cotton fibres being left in the wound. Do not leave the cotton surrounding the tip in the wound and check for splinters prior to use. If unable to reach the tunnel or undermining base using a sterile 15cm (6 inch) cotton tip applicator or probe, contact a Physician/NP before packing the wound and inform the Wound Clinician. Further investigation may be required to find the base of the tunnel or undermining and to assess whether it extends into a body opening (e.g., fistula).
18. Remove gloves. Perform hand hygiene.	
19. Take photos of the wound if required. Perform hand hygiene.	
Inserting the New Packing	
20. Put on gloves appropriate for the technique required to complete the dressing change.	
21. Apply a skin barrier/protectant on the peri-wound skin as needed.	Saturated packing materials and/or wound exudate may macerate or irritate unprotected peri-wound skin

Steps	Key Points
Inserting the New Packing con't	
22. Use the largest possible size of packing material available for the size of the wound and wherever possible, use only one (1) piece or length of packing to loosely fill the cavity, undermining, sinus tract or tunnel. If needed, cut packing material to the appropriate length/size with sterile scissors. NOTE: If it is necessary to use more than one (1) gauze ribbon packing piece, the pieces must be tied together using sterile gloves; ensure the knot(s) is secure. If two (2) or more gauze ribbon packing pieces are tied together ensure that the knots are placed in the wound cavity and not in the undermining, sinus tract or tunnel. If two (2) pieces of gauze ribbon packing material are tied together notify the Wound Clinician or Physician/NP.	Using two or more pieces increases the risk of leaving a piece of packing in the wound; packing left in the wound can cause infection and impair wound healing.
23. **NS gauze packing**: Moisten the gauze with sterile NS and use forceps or sterile gloves to wring out the gauze so it is damp, but not wet. Enclose non-woven edges in the center of the packing material. **Other packing materials**: See specific Product Information Sheets on CLWK Skin & Wound website A contact layer dressing may be used to protect the wound bed, as needed.	Gauze packing that is too wet can cause tissue maceration and reduces the absorbency of the gauze. NS gauze packing needs to be changed at a minimum of once daily.
24. Using a sterile gloved hand, a clean gloved hand with either sterile forceps or sterile cotton tipped applicator or sterile metal probe, gently guide enough packing material into the wound cavity, undermining, sinus or tunnel to fill the dead space without causing the wound tissue to stretch or bulge. Packing should be in contact with the entire wound base and wound edges.	Over-filling the dead space(s) too tightly will cause pressure on the wound tissue which can cause pain, impair blood flow and further damage tissue. Under-filling the dead space(s) reduces the amount of packing material in contact with the base and sides of the cavity, undermining, sinus tract or tunnel and can lead to rolled wound edges and/or abscess formation. If using a cotton-tipped applicator, ensure that the cotton surrounding the tip is not left in the wound and check the applicator for splinters prior to use.

Steps	Key Points
Inserting the New Packing con't	
25. Always leave a "tail" of packing materials either clearly visible in the wound cavity or on the periwound skin; use a steri-strip or paper tape to secure the packing 'tail' to the periwound skin.	Leaving a "tail" of packing visible in the wound facilitates easy removal. If the knot is visible in the wound it is less likely that a packing piece will be lost if the knot comes undone. A knot exerting pressure on the wound surface may impair blood flow and potentially cause necrosis in the wound.
26. Apply an appropriate cover dressing.	
27. Using a permanent marker or ballpoint pen, write the number of packing pieces on the cover dressing. Wipe the pen with a hospital grade disinfectant to cleanse and disinfect after use.	Documenting the number of packing pieces on the cover dressing will alert the nurse who does the next dressing change to the number of packing pieces that must be removed.
If saving dressing pieces for the next dressing change, save dressing pieces appropriately (see Wound Infection Guideline)	If using packing from a multi-use container or using appropriately saved dressings, each client must have a container/storage bag for each product, labelled with the client's name, the name of the product, the date the container/bag was first opened and must be discarded after 2 weeks.
28. Clean the work surface.	
29. Remove gloves and any personal protective equipment and perform hand hygiene.	

Documentation

1. For any cavity, undermining, sinus tract or tunnel with a **depth greater than 1cm (> 1cm**), count and document on the approved agency form, the number of packing pieces removed from and the number of packing pieces inserted into the wound. Packing pieces include any contact layers, sheet dressings, ribbon and/or rope packing materials used.

2. If it was required to tie ribbon packing together, document the number of pieces tied together and that the Physician/NP or Wound Clinician were notified.

Definitions

Aseptic Technique - Technique used to limit the transfer of microorganisms from one person to another by minimizing the microbe count and preventing cross contamination; includes sterile, no-touch, and clean technique. The decision regarding the appropriate aseptic technique is made based on the client's clinical condition, the wound etiology, the wound location, the invasiveness of the dressing procedure, the goal of care, and agency policy.

- **Sterile Technique** - the use of sterile gloves, a sterile field, sterile tray, sterile instruments, sterile solution and sterile dressings. Only sterile gloved hands or instruments are used for direct contact with the wound.

- **No-Touch Technique** - the use of clean gloves and a sterile field, sterile tray, sterile instruments, sterile solution and sterile dressings. Only sterile instruments are used for direct contact with the wound.
- **Clean Technique** - the use of clean gloves (single client use, non-sterile), a clean field, a clean or sterile dressing tray, clean instruments (single client use), clean solution (single client use) and clean dressings. Clean gloved hands or instruments are used for direct contact with the wound.

Client - Recipient of care: in the community-client, in residential care-resident, and in acute care-patient.

Client/Family - Family is two or more individuals who come together for mutual aid. Families are self-defined, and family is 'who the client says their family is'; this is individualized.

Dead space - The space left in the body as a result of tissue loss; the wound area that is packed.

Fistula - An abnormal track connecting an organ to the skin surface or wound bed or to another organ.

Packing - The process of loosely filling a wound cavity or dead space with gauze sponges, gauze strips or other appropriate packing material.

Product Information Sheet (PISheet) - Product Information Sheet(s) are developed by the Provincial Nursing and/or Interprofessional Skin & Wound Committee. PISheets are found on the British Columbia Patient Safety and Quality Council's Connecting Learners With Knowledge website https://clwk.ca

Sinus or tunnel - A channel that extends from any part of the wound and tracks into deeper tissue.

Undermining - A separation of tissue that occurs underneath the intact skin of the wound perimeter.

References/Bibliography

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