CVAD Assessment and Dressing Management Guide

Aim

A clean, dry, intact, and comfortable dressing that provides catheter safety and securement

CVAD (central venous access device) dressings should be replaced every 7 days or earlier if there is ooze, moisture or the dressing is not intact

Essential

- Drying time
- Visible exit site
- Catheter securement

Abbreviations

Chlorhexidine Gluconate (CHG)
Transparent Semipermeable (TSM)
Sodium Chloride (NaCl)

Skin and exit site assessment



Skin Changes



Standard Care

Skin and exit site assessment

Skin antisepsis: 2% CHG & 70% alcohol swab sticks

Dressing material: 3M™ Tegaderm™ IV advanced 1685 –

TSM Dressing

Skin protectant: 3M™ Cavilon™ no sting barrier film wipes

CHG gel dressing 3M[™] Tegaderm[™] - used in paediatric intensive care unit and may be considered for patients identified as high-risk for CLABSI

Securement:

- Always loop Broviac and Hickman catheters ensuring catheter joint is secured under dressing
- When dressing catheters with SecurAcath ensure the catheter 'wings' are secured under dressing – for dressing guide refer to Starship Clinical Guidelines

Critical Practice Points

- · Allow skin to completely air dry before applying dressing
- Do not stretch dressing over skin when applying
- Use low and slow technique when removing dressing

Skin Changes

Exit site infection: Redness, hardness, tenderness within 2cm of catheter exit site; possible with other signs and symptoms of infection such as fever or purulent fluid; <u>Bacterial swab culture of exit site and blood cultures should be sent</u>

Skin injury: Skin stripping, skin tear, tension blister

Prevention – use adhesive remove wipes, Barrier film - 3M[™] Cavilon [™] wipes and gentle application of dressing without stretching over skin

Skin irritation: Irritant contact dermatitis or allergic contact dermatitis; may be a component of the antisepsis solution, skin barrier solution or dressing - <u>identify</u> and <u>eliminate cause</u> (See below for management)

Prevention – allow skin to completely air dry before applying dressing to prevent MARSI (medical adhesive related skin injury)



Exit site infection



Skin injury

Discuss any changes with the medical team and vascular access CNS

and document on central line insertion and care bundle form



Skin irritation/dermatitis

Contact dermatitis

Cause: Irritant, allergic, moisture associated **Signs/symptoms:** Redness, shiny, burning, pain, itch, vesicles, or exudate on skin surrounding CVAD exit site

Management:

Rule out infiltration/extravasation and other potential skin conditions Determine cause and discuss with vascular access CNS

1. Alternative skin antisepsis

- Consider CHG sensitivity and change to Providine-Iodine 10%
 + skin test patch*
- Always use antisepsis at exit site, NaCl may be used for surrounding skin if severely impaired

2. Alternative dressing materials and skin protection

- If reaction continues following elimination of CHG and skin remains intact, apply alternative TSM dressing Polyskin (Kendall) or IV300® dressing
- Ensure use of 3M[™] Cavilon[™] no sting barrier film wipes prior to applying dressing

For exudate/broken skin surrounding exit site**

Use a silicone-based absorbent dressing – Mepilex Lite or Biatin

Discuss dressing options with vascular access CNS

*Skin Patch test

- 1. Apply product to forearm
- 2. Monitor for 30 60 mins
- 3. Observe over days for signs of dermatitis

Critical Practice Points

- Avoid adhesive on broken or excoriated skin
- NaCl and Providine-Iodine require extended drying time
- Eliminate irritant and consider antihistamine to manage itch







**Cut silicone dressing using sterile scissors, apply to damaged skin, ensuring catheter exit site is visible and cover with TSM dressing Resume TSM dressing once skin is healed

Assess skin and exit site each shift. Ensure dressing is clean, dry and intact - replace if needed.

Document all assessments, procedures and interventions on central line insertion and care bundle form



References:

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Hitchcock, J., & Savine, L. (2017). Medical adhesive-related skin injuries associated with vascular access. British journal of nursing, 26(8), S4–S12.

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