



Standard Operating Procedure for the Management of Haemodialysis Access Site

Introduction

Haemodialysis access site infection can be greatly reduced by using aseptic technique, appropriate cleansing agent, dressing, and education of staff, parent and patients. Dressing should be changed weekly (maximum). The dressing should be examined during each dialysis session and changed if required. Renal Association Guideline 5.3 states that an exit site should be cleaned with 2% Chlorhexidine gluconate (Jan 2011).

Purpose

This standard operating procedure describes the operations followed when changing the dressing over a central venous catheter

Who carries out dressing?

Haemodialysis access site dressing should be carried out by a trained member of staff. It must not be changed at home by parent unless the have been taught correct technique and advised to do so.

Equipment Required

- Dressing Pack
- Chloraprep® sponge (Chlorhexidine gluconate 2% and Isopropyl alcohol 70%).*
- IV 3000® Dressing/Mepitel dressing
- Bio patch® disc
- Sterile gloves and Apron
- Adhesive remover
- Securing tape

***Chlorhexidine gluconate 2% is not for use on children under 2 months old. Chlorhexidine 0.5% should be used in this patient group.**

1. Wash hands and dry thoroughly.
2. Clean work surface and dry thoroughly.

3. Gather required equipment.
4. Wash Hands for a minimum of 60 seconds.
5. Open dressing pack, take the corners and access sterile field with minimal touching.
6. Open all equipment onto the trolley.
7. Wash hands.
8. Remove old dressing using adhesive remover to prevent skin trauma.
9. Examine site if inflammation/leakage noted, swab for culture.
10. Sutures can be removed after 14 days if they become inflamed, do not require to be removed routinely.
11. Wash hands and apply gloves.
12. Using Chloraprep® sponge and a back and forth movement with a gentle scrubbing motion for 30 seconds, concentrating on the insertion site, then work outwards.***
13. Allow to air dry for 30 seconds.
14. Apply Bio patch® around catheter over exit site
15. Secure with IV 3000 or Mepitel
16. Additional adhesive tape can be used to reinforce dressing.

*** The combination of 2% chlorhexidine gluconate (CHG) and 70% isopropyl alcohol (IPA) is better than IPA alone.** The combination of fast-acting and long-lasting antimicrobial activity is the key to an effective skin antiseptic. IPA alone provides a 99.99% reduction in bacteria, but it does not provide long-lasting microbial kill. CHG maintains antimicrobial activity, demonstrating 2 log¹⁰ and 3 log¹⁰ for at least 48 hours compared to two hours for free iodine. Because Chloraprep® contains the combination of isopropyl alcohol and chlorhexidine, it is superior to isopropyl alcohol alone. (Chloraprep® Skin antiseptic FAQ's Care Fusion 2014)

*****Clinical testing has shown that the back-and-forth motion used to apply Chloraprep® supports the efficacy of the solution. Because 80% of transient skin flora resides in the first five cell layers of skin⁷, it is important to reach those lower cell layers and kill the bacteria dwelling further down. The skin contains many cracks and crevices where harmful bacteria reside. The back-and-forth action creates**

friction and helps work the solution into crevices and lower layers. Further, there is no published data to support the concentric circle application methodology. (Chloraprep® Skin antiseptic FAQ's Care Fusion 2014)