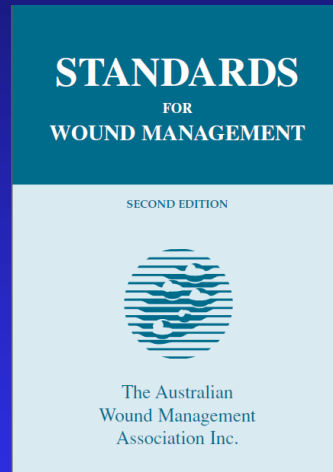


# Wound cleansing: AWMA standards for Wound Management



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# Wound Cleansing

“The application of fluid to aid removal of exudate, debris, slough and contaminants”

“Wound cleansing helps optimize the healing environment and decreases the potential for infection. It loosens and washes away cellular debris such as bacteria, exudate, purulent material and residual topical agents from previous dressings. Most wounds should be cleansed initially and at each dressing change”



# Standard 4.1 for Wound Management

- Use an aseptic wound technique when the patient is immunosuppressed, wound enters a sterile body cavity, during the peri-operative period, when wound environment is compromised, or service provider protocols dictate
- 4.2 Use a clean wound management technique i.e. washing or showering of wounds when 4.1 is not demonstrated (Dressing pack may not be required)



# What denotes compromised or immunosuppressed?

- ??? Any individual who is an in-patient in an acute care setting
- If the wound is the primary cause of admission
- Immunosuppressed; drug mediated (i.e. chemo), diseases (i.e. HIV)
- Health conditions; i.e. diabetes, PVD
- Specific wounds/procedures, i.e. burns, SSG, r/o drains, CVC/PICC dressings, acute wound dehiscence to deep cavities (i.e. sternum)



= aseptic wound technique,  
using sterile saline and a  
dressing pack



# Clean technique



# Solutions, techniques and pressure in wound cleansing (JBI, 2006)

- Potable tap water is an effective cleanser for chronic wounds, in healthy adults
- Showering does not impact on infection or healing rates of post-op wounds
- Showering ulcers and chronic wounds should be done with caution
- Soaking in 1% PI is not effective in reducing bacterial count
- PI should be applied to the area, left for 3 - 5 mins, then washed off (2003) , no evidence of optimal time (2006)



# Standard 4.4 for Wound Management

## 4.4 Maintain a constant wound temperature consistent with optimal healing

- Avoid exposing the wound to cooling temperatures
- Use wound cleansing solutions and products at room temperature (i.e. Flamazine)
- Gently warm saline before use
- Minimise wound exposure time



# Standard 4.6 for Wound Management

- 4.6.3 Prevent and manage infection by performing adequate wound cleansing and debridement to minimise contamination by exogenous micro-organisms (T,I)
- 4.6.4 Use appropriate products to protect the wound from infection



# Antiseptic solutions

- Used to reduce bacterial/fungal burden
- Broad spectrum of activity
- Can be bactericidal or bacteriostatic
- Appropriate and judicious use at optimal concentrations is essential
- 4.8.3 Avoid known or toxic agents or allergens
- 4.10 Use products for the indications approved by the TGA



# Povidone Iodine

- TGA : A topical antiseptic for use as pre-operative skin antiseptic and for the treatment of minor cuts, abrasions and skin infections
- Debate still exists over cytotoxicity
- Readily de-activated when used as a dressing/packing
- As a soak, wait 5 minutes, then rinse off



# Acetic Acid



- ? TGA; Vinegar
- Effective against Pseudomonas
- Requires frequent application
- Debate still exists over cytotoxicity
- Can be painful
- Recommended to be used with caution



# Chlorhexidine



- Solution, or impregnated sponge
- TGA: Use as a surgical scrub and cleansing of chronic wounds
- At low concentrations it inhibits enzymes associated with bacterial membranes
- Toxicity in wounds is not established



# Potassium Permanganate



- An oxidising agent with disinfectant, deodorising and astringent properties
- Concentration of 1:10000 should be used (pink colour)
- TGA: antifungal solution
- Used for infected eczema, blistering skin, cleansing, weeping ulcers, fungal infections
- As an astringent, it produces a transient localized vasoconstriction leading to a reduction of exudate
- ? cytotoxicity



# Prontosan (Polyhexamethylene biguanide - PHMB)

- Polyhexanide (PHMB) a powerful antimicrobial agent that can reduce bioburden
- Betaine a gentle effective surfactant to penetrate, clean and remove wound debris and biofilm
- Safe to use on skin & mucous membranes
- Available as a solution and a gel
- Solution: soak gauze and leave on the wound for 10 minutes





# Standard 4.8 for Wound Management

## 4.8 Protect the wound environment

4.8.1 Avoid aggressive wound cleansing unless the goal is debridement

4.8.2 Avoid products that traumatise the wound bed



# Considerations

Ensure the etiology of the wound is known and that cleansing choice is appropriate





# Considerations

- If the wound is on the foot, bag it for showering; if high risk foot, aseptic technique
- When considering solutions, need to weigh up impact of bacteria on wound vs. use of antiseptics
- If the solution causes pain, re-evaluate choice
- Environment may impact on technique and solution



# Conclusion

- Wound cleansing is often undertaken as a ritual exercise, rather than an evidence based activity
- Assess the patient and the wound to determine whether potable water is suitable for cleansing, or whether aseptic technique is safer
- The most effective antiseptics should be: non-toxic, broad spectrum in action, reduce wound bio-burden, easy to apply and not cause pain on application

