

ANOINTING OR CLEANSING

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THE ELEPHANT IN THE ROOM

- UK £4.5-5.1 BILLION FOR 2.2 MILLION WOUNDS ANNUALLY
- EXCLUDES DERMATOLOGICAL AND SURGICAL WOUNDS
- 14.1% ON PRODUCTS

THE ELEPHANT IN AUSTRALIA

- 4000,000 people at any one time have a wound
- Annual cost \$2-4 billion
- Future implications for ageing population and increase in diabetes
- New Zealand -----???????

MANAGING WOUNDS

- How well do we do it?
- 41.8% of patients in a UK study had no differential diagnosis and 16% with leg or foot ulcers had not had an ABPI

RECOGNISING BIOFILMS

- Not yet!
- If other factors (holistic and wound related) addressed and wound still not healing treat as though a biofilm is present
- Over 78% of chronic wounds have a biofilm

WOUND BED PREPARATION (WBP)

- Removal of debris/slough
- Accelerate healing
- Facilitate effectiveness of other therapeutic treatments

BIOFILM BASED WOUND CARE

- Aims to remove and disrupt biofilm formation
- Prevent re-formation of biofilm

BIOFILM BASED WOUND CARE

- Preventing biofilm formation – how realistic?
- Biofilm suspected – debride, disrupt and follow up with surfactant and anti-microbial
- How often? – Repeat every 72 hours and re-assess the wound regularly

DEBRIDEMENT

- Needs to disrupt surface to let other products in
- Options in practice: mechanical – Debrisoft, Prontosan pad, high speed water
- Sharp – depending on your employer policies
- NOT just removal of slough (WBP)

WOUND CLEANSING/IRRIGATION

- Normal saline or sterile water
- Wash over the surface and under pressure will remove loose debris
- Do not impact on biofilm development or mature biofilms (except under water under extreme pressure)

PRODUCTS IN NZ TO ASSIST WITH BIOFILM CONTROL

- Prontosan- betaine (surfactant) + polyhexanide (antiseptic)
- Microdacyn – Sodium hypochlorite and hypochlorous acid
- Octenilin – Octenidine HCL

PRONTOSAN

- Solution, gel and debriding pad
- Reduces surface tension and destroys adhesion bridges between biofilms and the wound surface
- Effective against Gram –ve and +ve bacteria

MICRODACYN

- Solution and gel
- Na HCL as weak solution – acts as oxidiser
- Hypochlorous acid – deactivates bacteria
- Effective against Gram-ve and +ve bacteria

OCTENILIN

- Solution and gel antiseptic
- Binds to bacteria and disrupts bacterial cell activity
- Reduces surface tension
- Broad spectrum + MRSA and fungi

ANTIMICROBIAL WOUND DRESSINGS

- Silver – anti-inflammatory
- Helps manage bioburden
- Provides anti-microbial barrier

ANTI-MICROBIAL WOUND DRESSINGS

- Honey – medical grade, usually manuka
- Autolytic debridement
- Impede biofilm formation and disrupt established biofilm
- Reduce odour
- pH around 3.5

ANTI-MICROBIAL WOUND DRESSINGS

- Iodine – Povidone or Cadexomer
- Treats localised and spreading infection
- Suppresses biofilm formation
- Prevents bacterial resistance

POLYHEXAMETHYLENE BIGUANIDE (PHMB)

- Used for wounds, eye lens, peri-operative preparations and swimming pools
- Broad spectrum activity
- Low cytotoxicity
- Sustained release

WHICH ANTIMICROBIAL WOUND DRESSING SHOULD I USE?

- Appropriate wound
- Appropriate concentration
- Appropriate time

ANTISEPTIC RESISTANCE

- Predictions are that:
- By 2050 10 million deaths worldwide will be from microbial resistance
- Chief medical officer UK likens this to similar to a **terrorist threat** (Roberts and Leaper, 2017)

MANAGING WOUNDS – TAKE HOME THOUGHTS

- How well do we do it?
- Can we do better without increasing the risk of microbial resistance

MY MUM WILL LOOK AFTER ME!



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