Wound Care Treatment Options

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Driven by condition of wound bed and surrounding tissue.

Treatments may be combined to create an optimal healing environment.

A given wound may have several appropriate treatment options.

Treatment should be changed in non-healing wound after 2-4 weeks if no known cause for healing delay.
Basic Treatment Categories

- Moisture donating
- Moisture absorbing
- Enzymatic
- Hemostatic
- Antimicrobial
- Cavity filling
- Stimulatory
- Substrate providing
- Artificial membranes
Treatment Decisions

- If you have necrotic tissue—Debride it
- If it is too wet—Absorb it
- If it is too dry—Moisten it
- If there is a cavity—Fill it
- If there is infection—Kill it
- If there is bleeding—Stop it
- If there is odor—Eliminate it
Debridement Options

Autolytic: Slowest, uses bodies own enzymes to slowly eat away necrotic tissue

- Mechanical: Physical removal of necrotic tissue, ie wet-to-dry, pulse levage, whirlpool, ect…

- Enzymatic: Chemical enzymes that debride away necrotic tissue over a period of days to weeks.
Surgical Sharp Debridement

- Removal of necrotic tissue with a curette or blade.
- Well documented effectiveness in healing and prevention of infection.
- Removal of senescent cells in the presence of little visible slough.
- Repeated procedures necessary to achieve optimal effect.
- Performed by a trained clinician (Physician or trained Nurse Practitioner).
Collegenase (Santyl)
- Obtained from bacteria
- Selective debridement of tissue types
- Viewed as working from wound base up

Papan-urea
- From papyae plant
- Non selective necrotic tissue debridement
- Viewed as working from the top down

Avoid use with silver products
Antimicrobials

- Antibiotics: Over-use may lead to resistant bugs
- Silver: Bacteriostatic, no known resistance, not an antibiotic, therefore no resistance develops, but patient sensitivity can
- Avoid treating cultures of biofilm
Wound Cultures

- Avoid cultures in well healing wounds without signs of infection
- Gold standard is tissue biopsy after removal of necrotic tissue and slough
- Lavine technique when biopsy not possible
- Biopsy should be performed by trained clinician.
Cavity Filling

- Calcium Alginate (maxorb)
- Hydrofibers (aquacel)
- Iodaform
- Silvasorb Cavity
- Hydrogel impregnated gauze
Stimulatory Agents

- Collegen Dressings (Fibercol, Puracol, Cellerate)
- Growth Factors (Regranex, Oasis)
- Trypsin containing agents (Xenoderm, Granulex)
Tissue dressings

- Apligraf
- Skin Grafts
- Skin Flaps
Older Treatments to Avoid

- On rare occasions these treatments may still be appropriate.
  - Wet-to-dry
  - Dakin’s Solution
  - Betadine, Iodine, etc…
Closing Remarks

- Wound bed condition drives treatment choice.
- Removal of necrotic tissue prevents infection, reduces bioburden, and stimulates new growth.
- Re-evaluate wounds frequently and consider changes if 2-4 weeks pass without improvement.