

# Wound Bed Preparation



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# Foundations in Plastic Surgery



Healing cannot proceed in a  
metabolically hostile environment

# TIME was Right

**T**

**TISSUE** – debride devitalized tissue and foreign material

**I**

**INFECTION & INFLAMMATION**  
identify and address

**M**

**MOISTURE** – assess and optimize volume and nature of exudate

**E**

**EDGE** – assess for viability, undermining, & responsiveness

Schultz GS, et al. Wound bed preparation: a systematic approach to wound mgt. WRR 2003; 11:1-28

# TISSUE



Initial debridement should be aggressive and attempt to remove ALL devitalized tissue and foreign debris that might create barriers to healing.

# TISSUE





# The Evidence

Original Investigation

Frequency of Debridement and Time to Heal

A Retrospective Cohort Study of 312,744 Wounds

**CONCLUSIONS AND RELEVANCE** The more frequent the debridement, the better the healing outcome.

James R. Wilcox, RN et al JAMA Dermatol.

doi:10.1001/jamadermatol.2013.4960 Published online July 24, 2013.

# Infection & Inflammation

- Inflammation is physiologic to healing
- Infection is not physiologic and requires tx
- Treatment of infection should be:
  - Targeted by C&S when possible
  - Stopped when microbial balance is restored
- All culture methods are not created equal
  - Biopsy is best
  - Curettage is nearly equal
  - Swab is acceptable, ideally with Levine technique

# Infection & Inflammation

- Biofilm is not something you can see
- Biofilm incites inflammation
- Debridement disrupts & weakens biofilm





# Moisture Balance

- Excessive or deficient moisture is damaging
- Epithelium cannot migrate across dry wound
- Excess exudate = physiologic malfunction
  - Infection
  - Suboptimal edema control
  - Metabolic issues
- Select topical care to optimize moisture balance

# EDGE & EPITHELIAL MIGRATION

- Undermining
- Epibole
- Senescent or unresponsive tissue



**BUT WAIT**



**THERE'S MORE**