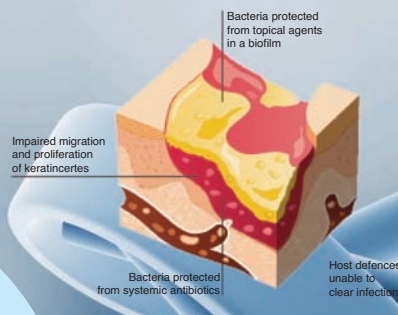


Biofilms In Chronic Wounds

Kumal Rajpaul, Tissue Viability Nurse Specialist,
Kings College Hospital NHS Foundation Trust, London, UK



Characteristics of Biofilms

Biofilms are sticky multicellular organisms. Clinically they appear as translucent shiny, glazed, slime manifestation often containing slough not responding to traditional antimicrobial therapies and showing no signs of healing^(2,3).

Implication to wound care

Delayed healing
Prolonged chronicity of wounds
Difficult to diagnose
Mismanagement of wound care
Reservoir of infection
Resistance to antibiotics
Impair the migration and proliferation of keratinocytes⁽⁴⁾

What is a Biofilm?

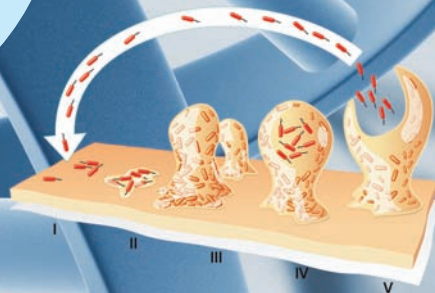
Biofilms are complex structures of microbial-associated cells embedded in an extra-cellular matrix of hydrated extrapolymeric substance, which are irreversibly attached to a biological or non-biological surface⁽¹⁾.

Diagnosis of Biofilms in wounds

Clinical Assessment⁽⁵⁾
Light Microscopy (LM)
Scanning Electron Microscopy (SEM)
Molecular Analysis
Culture Analysis⁽⁶⁾

Treatment

Biofilm based wound care⁽⁷⁾
Sharp debridement with maintenance debridement
Hydro-surgical debridement
Surgical debridement
Prontosan® Wound Irrigation Solution and Gel
Silver impregnated dressings⁽⁸⁾
Iodine dressings
Antibiotics



5 Developmental stages of a Biofilm

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