Wound Expo 2019

Assessing and Managing Infected Wounds Zone

Fundamentals in assessing and managing wound infection

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Wound infection

- Painful and inconvenient to the patient
- Can lead to increased morbidity and mortality- sepsis
- Most frequent reason for hospital admission for patients with wounds
- An increasing risk – due to antibiotic resistance

What are your textbook criteria for infection

- Heat
- Swelling
- Redness
- pain

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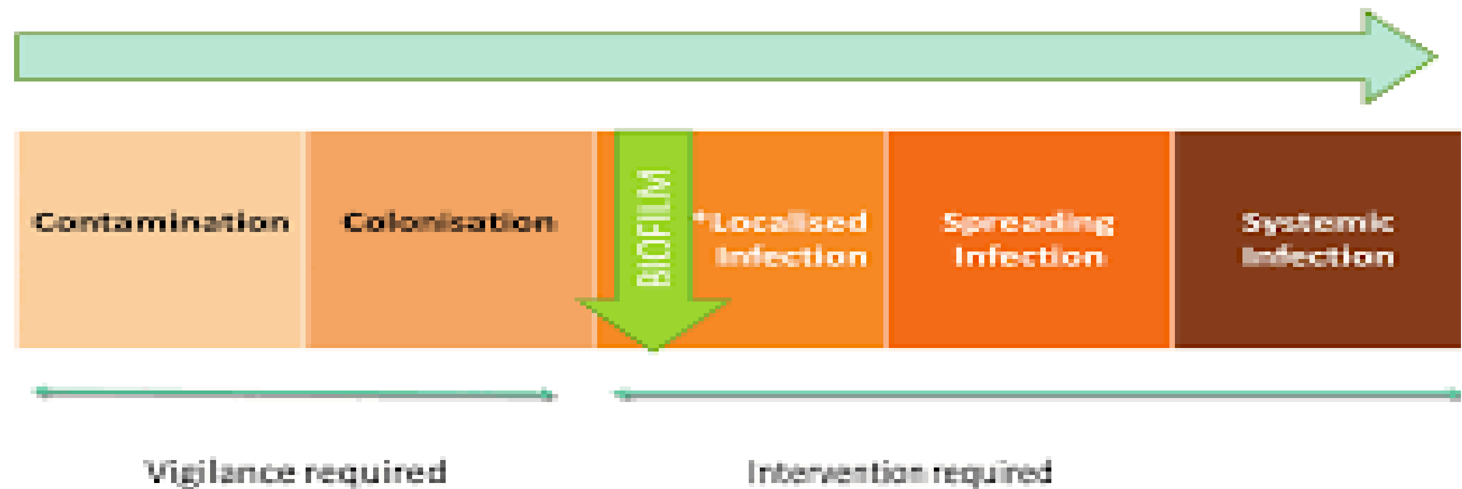
Wound infection Continuum

- There are 4 phases:



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Contamination-Infection Continuum

Increasing clinical problems

Vigilance required

Intervention required

Wound infection and other terminology

- **Colonisation:**
  - bacteria growing and multiplying but no effect on healing, pain or infection… also known as the ‘ normal state in chronic wound’
- **Critical colonisation**
  - Bacteria present in wound bed and delay healing, can cause pain but no overt infection
- **Infection**
  - Invasion of bacteria in tissues and causing pain, redness, increased exudate
  - Local- confined to wound area; or
  - Spreading- cellulitis

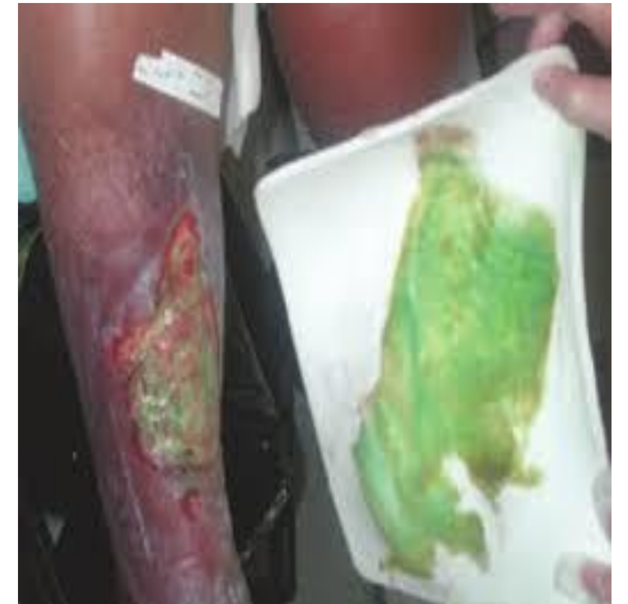
Colonisation

- All ‘chronic ‘ wounds (leg ulcers, PUs and DFUs) that are healing are colonised up to the point of healing

- !!! DO NOT OVER-TREAT WITH ANTIMICROBIAL

Critical colonisation

- Not healing despite standard care
- Painful
- Green exudate



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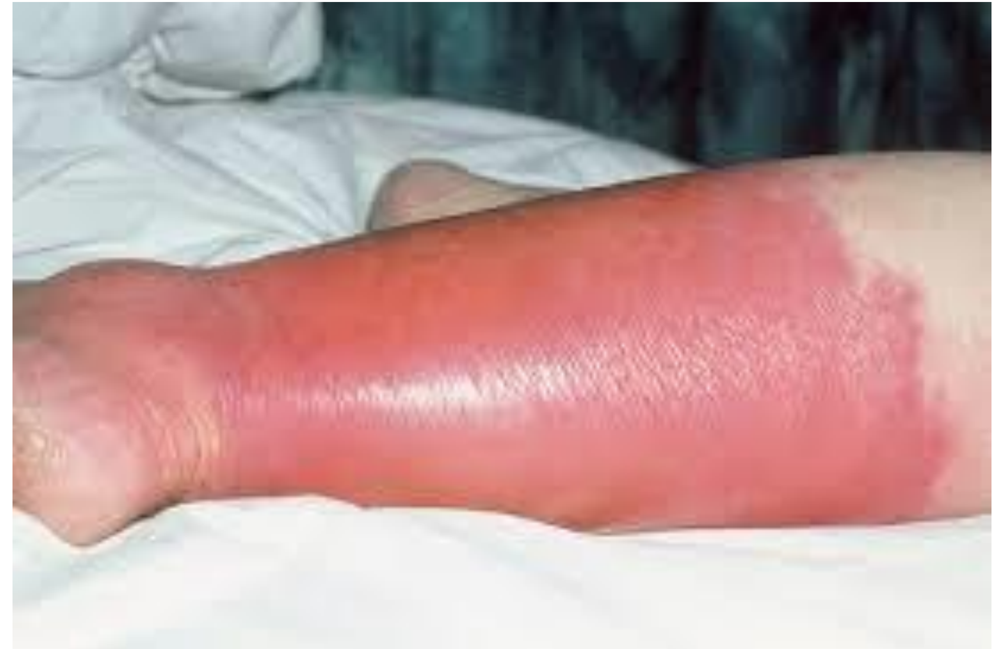
Spreading infection

- What would be the effect on this patient?



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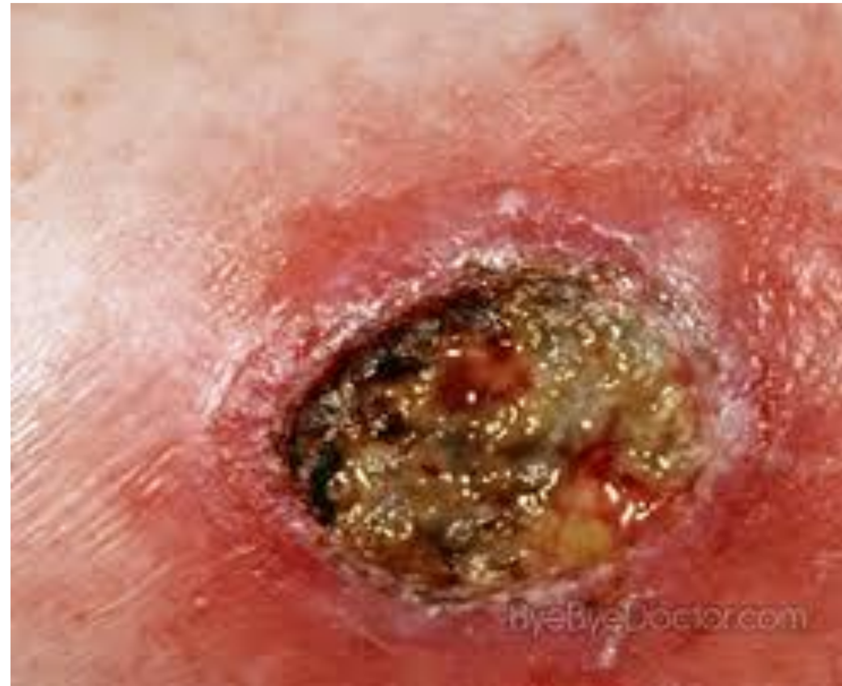
Local infection



List the tell tales signs that denotes presence of infection?

- Abscess formation
- Cellulitis
- Discharge (increased exudate)
- Delayed healing
- Discoloration of wound
- Friable , bleeding granulation tissue
- Unexpected pain or change in pain
- Pocketing or bridging in wound
- Malodour
- Wound breakdown

Best Practice statements to support clinical practice

- BPS: The use of topical antimicrobial agents in wound management
- BPS: Effective exudate management
- NICE: ‘Infection- prevention and control of healthcare associated infections in primary and community care’

How to overcome wound infection

- **Systemic therapy**
  - Via antibiotics- MUST be reserved for appropriate use
- **Topical antimicrobial agents**
  - Useful in managing wound bioburden in critical colonisation

consider key features when choosing:

sustained release of antimicrobial over days

safe and non-toxic

Reminder

- Match the dressing to the wound assessment
- Reduce cross infection is essential for all nurses undertaking wound care
- Ethical and legal duty to protect patient against infection

See NICE guidelines (2012)

Conclusion

- **Wounds healing by secondary intent are always colonised; this does not mean that they MUST be treated with Antimicrobials**

- **Clinical signs of infection demand treatment**

- **Remember the clinical criteria of infection**

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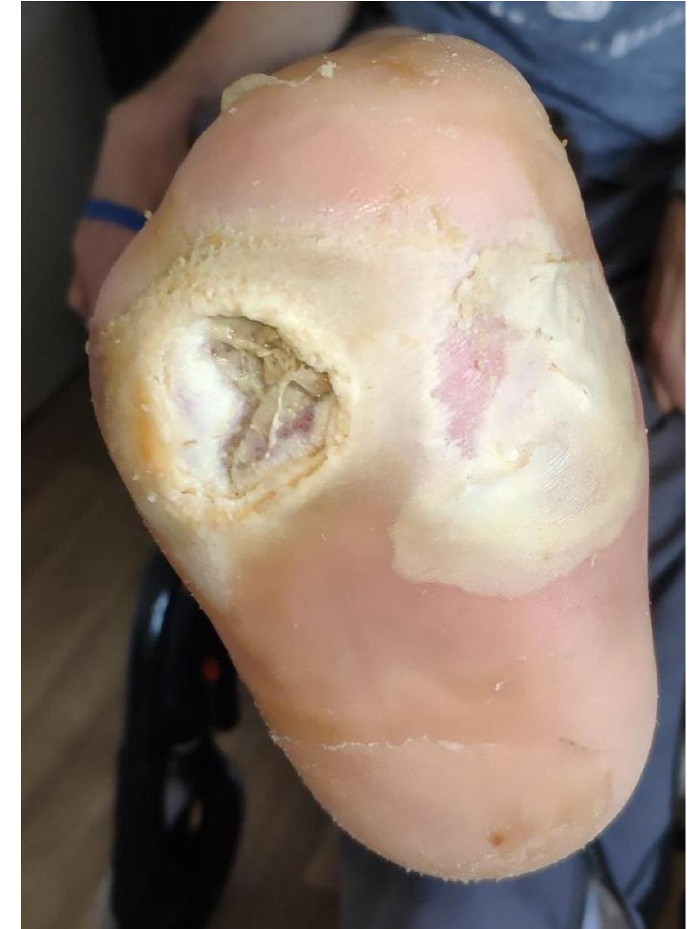
Case Study 1



- Hypertension, Diabetes Mellitus - I
- Hypercholesterolaemia
- Previous duodenal ulcer requiring operative management
- Under investigation previously for seizures, ?non-epileptic- unconfirmed
- Left amputation below ankle (initial plan for toe only)
- Right above ankle amputation
- Type 1 diabetes
- Evidence of peripheral neuropathy on examination

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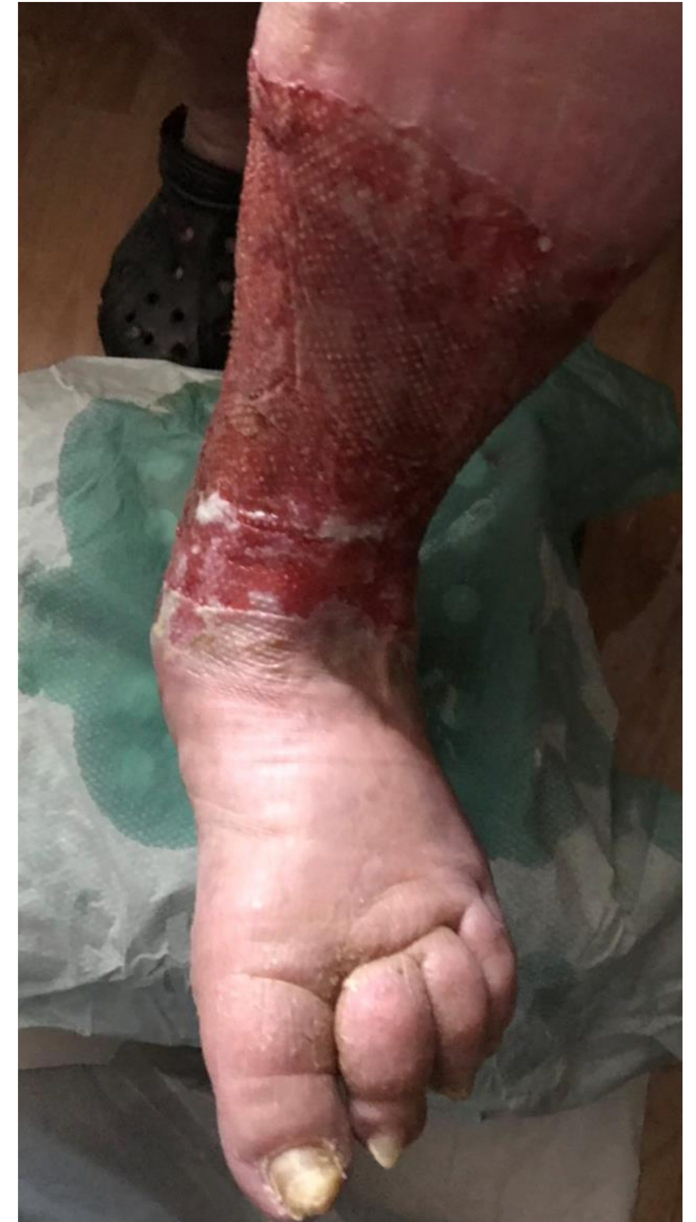
Case Study 2

- Hypertension, asthma, renal failure, diabetes type II, obesity, chronic leg ulcers
- Sleeps in recliner, ABPI within normal range



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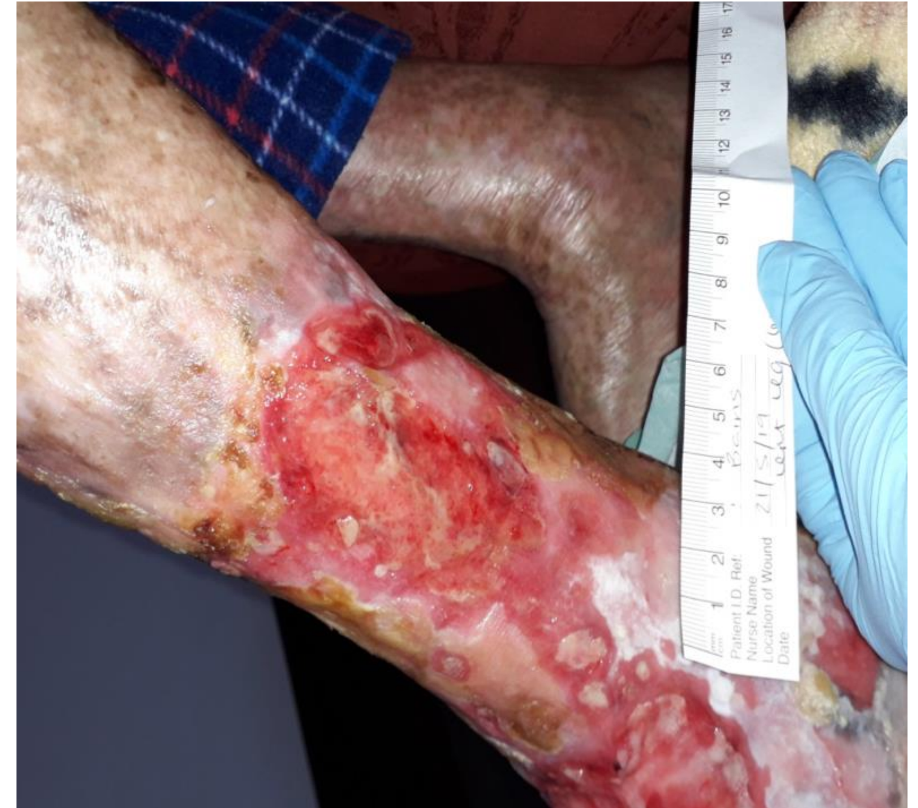
Case Study 3



- Dystonic Tremors
- B/L leg ulcers with prev SCC- excised
- Right NOF 2013 SLE, Ltd cutaneous scleroderma, reduced mobility, wound bed> 2 years
- Seen by Vascular

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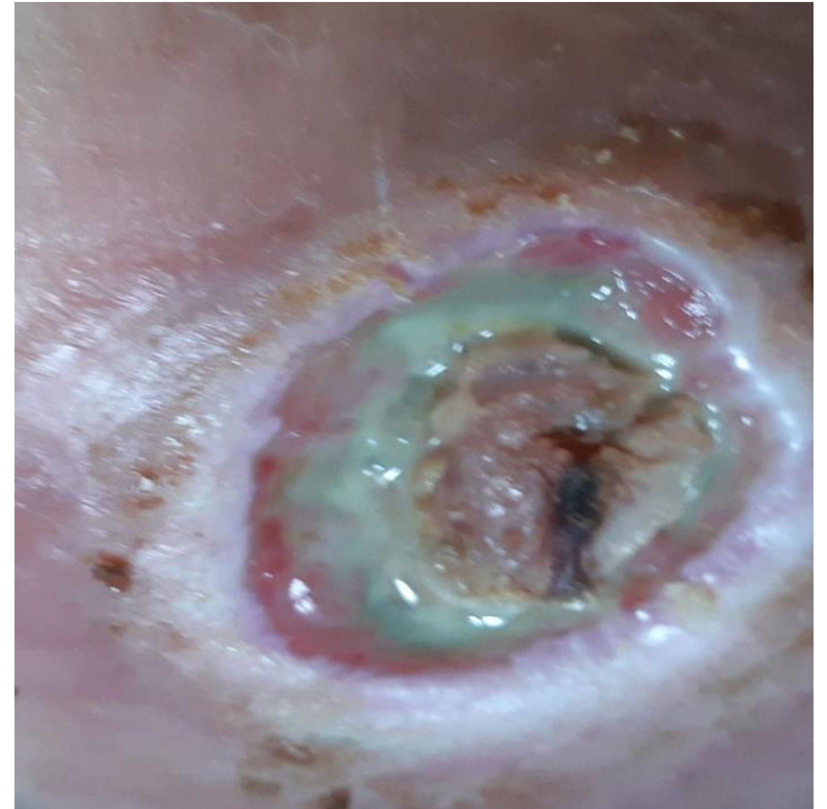
Case Study 4

- T2DM
- Ulcer to malleolus, wheel chair bound. Ulcer duration > 6 months
- Patient declined ABPI or compression



Thank you