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GOLD COAST  
An Australian Government Initiative

**WOUND SPECIALIST**  
Services

**'Let's Talk Wounds'**  
**Wound Infection Webinar**

Thursday 21 May 2026

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**Acknowledgement to Country**

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*Gold Coast Primary Health Network would like to acknowledge and pay respect to the land and the traditional practices of the families of the Yugambeh Language Region of South East Queensland and their Elders past, present and emerging.*

Artist: NARELLE URQUHART, WIRADJURI WOMAN

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**Webinar Housekeeping**

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- Please keep your cameras off and microphones muted unless invited to participate
- Questions via "Chat" to "everyone"
- The event is being recorded and will be available on the GCPHN website in the next few days

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**Introducing:**

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Dr Michelle Gibb | Wound Specialist Services

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**WOUND INFECTION**

21 May 2026

Dr Michelle Gibb  
PhD in Wound Care | Wound Care Clinician  
Wound Specialist Services

*Let's Talk Wounds*

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**INFLAMMATION**

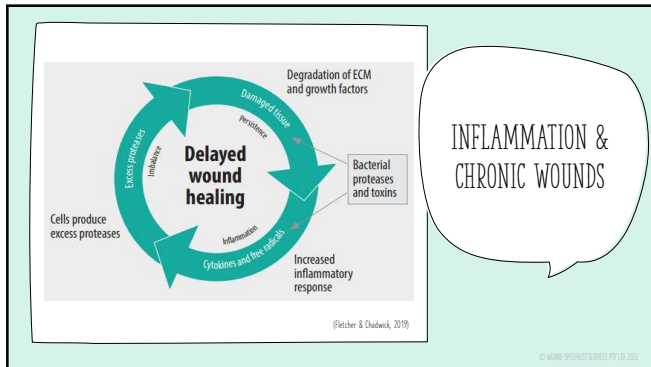
**REDNESS**

**HEAT**

**SWELLING**

**PAIN**

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**SYMPTOMS OF PROLONGED INFLAMMATION**

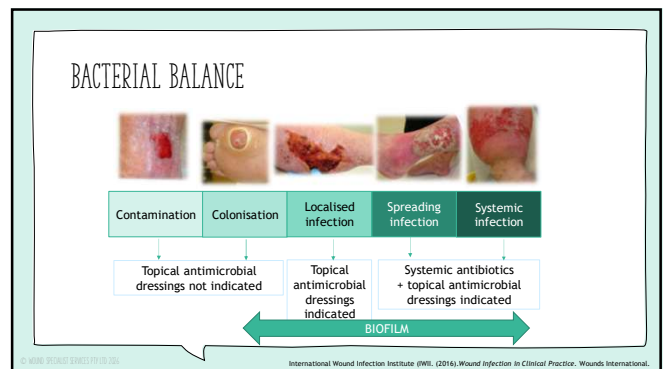
- Failure of a wound to significantly decrease in size
- Little to no change in wound bed colour
- Increased exudate
- Redness of the periwound tissue
- Development of rolled edges (epibole)

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...PRESENCE OF MICROBES IN SUFFICIENT NUMBERS OR VIRULENCE TO CAUSE A HOST RESPONSE LOCALLY AND OR SYSTEMICALLY.

- Wound Infection Institute, 2016:6

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**SYMPTOMS OF LOCAL INFECTION**

<p>Covert (subtle) signs of local infection:</p> <ul style="list-style-type: none"> <li>Hypergranulation</li> <li>Bleeding friable granulation</li> <li>Epithelial bridging &amp; pocketing in granulation tissue</li> <li>Wound breakdown and enlargement</li> <li>Delayed wound healing beyond expectations</li> <li>New or increasing pain</li> <li>Increasing malodour</li> </ul>	<p>Overt (classic) signs of local infection:</p> <ul style="list-style-type: none"> <li>Erythema</li> <li>Local warmth</li> <li>Swelling</li> <li>Purulent discharge</li> <li>Delayed wound healing beyond expectations</li> <li>New or increasing pain</li> <li>Increasing malodour</li> </ul>
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(Harden & Stoney, 2015)

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**SYMPTOMS OF SPREADING INFECTION**

As for localised plus:

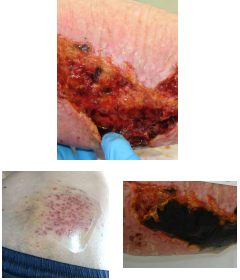
- Wound breakdown / dehiscence with or without satellite lesions
- Erythema or induration extending from wound edge
- Crepitus
- Induration
- Lymphangitis
- Malaise or other non-specific deterioration in patient's general health
- Loss of appetite
- Inflammation/swelling of lymph glands

(Harden & Stoney, 2015)

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### RISK FACTORS FOR INFECTION

- Comorbid conditions
- Hypoxia / poor tissue perfusion
- Immuno-deficiencies
- Malnutrition
- Smoking
- Type of wound & location
- Duration of wound



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### WHEN IS A BACTERIAL WOUND CULTURE NEEDED?

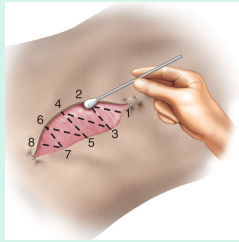
- Initial presentation of symptoms of infection
- Wound is not progressing after 2 weeks of optimal treatment
- Normal surveillance protocol
- Treatment completion (if local protocol advises)

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### HOW TO OBTAIN A BACTERIAL WOUND CULTURE

- Routine swabbing of all wounds is not recommended
- Clean the wound before taking a swab
- Do not cleanse with an antiseptic solution first
- Avoid the periwound skin
- The Levine technique is the preferred method
- Label swab, request form and provide appropriate clinical information
- Transport the swab in medium as soon as possible



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### MANAGEMENT OF WOUND INFECTION

Goal of treatment is to:

- Optimise host response
- Reduce the number of microorganisms (i.e. debridement & wound cleansing)
- Minimise the use of antimicrobial agents to reduce the selection of resistant strains
- Restrict the use of systemic agents to occasions when specifically indicated
- Avoid topical sensitisation or allergic reactions
- Patient education

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### EARLY INTERVENTION

- Wound hygiene
- Debridement
- Establish moisture balance

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### 2-WEEK CHALLENGE


- Antimicrobial dressings should be used for minimum of 2 weeks
- After 2 weeks, re-evaluate and then:
  - Discontinue if signs & symptoms of infection have resolved
  - Continue with antimicrobial if wound is progressing but there are still signs & symptoms
  - Consider an alternative antimicrobial & reference to an appropriate specialist if no improvement

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### WHEN TO USE SYSTEMIC ANTIBIOTIC THERAPY

- Abnormal/absent granulation tissue or necrosis
- Pocketing, tunnelling, maceration
- Static or enlarged wound size
- Spreading erythema >2cm from wound edge
- Pain changes in intensity
- Wound deteriorating despite best practice
- Systemic signs of infection



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### OUTCOME MEASURES

Within 1 week of using a topical antimicrobial there should be:

- Decreased pain
- Decreased exudate (level & type)
- Reduced odour
- Decreased oedema
- Improved periwound skin
- Decreased non-viable tissue, increased granulation tissue

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Left heel  
24 January 2024

Meet Rita

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### HISTORY OF PRESENTING COMPLAINT

<b>Medical / Surgical History</b> <ul style="list-style-type: none"> <li>• Chronic kidney disease</li> <li>• Depression &amp; anxiety</li> <li>• Type 2 Diabetes Mellitus</li> <li>• GORD</li> <li>• Hypertension</li> <li>• Cerebrovascular accident</li> <li>• Mixed vascular dementia</li> <li>• Congestive heart failure</li> </ul>	<b>Social History</b> <ul style="list-style-type: none"> <li>• Ex-smoker</li> <li>• Occasional alcohol</li> </ul>
<b>Allergies/Sensitivities</b> <ul style="list-style-type: none"> <li>• Sulphonamides</li> </ul>	

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### ASSESSMENTS

Bacterial wound culture

Vascular investigations

- 90% blockage of L) SFA

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MICROBIOLOGICAL EXAMINATION
Specimen: left heel swab
GRAM STAIN
A few leucocytes seen
A moderate number of epithelial cells seen
A few gram positive cocci seen
Numerous gram negative bacilli seen
No fungal elements seen
BACTERIAL CULTURE
Org 1: Proteus mirabilis ***
Org 2: Pseudomonas aeruginosa ***
Comment: No anaerobes isolated after 48 hours
SUSCEPTIBILITY
          Org 1  Org 2
Amp/Amoxyicillin      S      R
Amoxicillin-clavulanic acid  S      R
Flucloxacillin/fluconazole  S      R
Clindamycin            S      R
Ceftriaxone            S      R
Ciprofloxacin          S      R
Colistinazole          S      R
Gentamicin             S      R
Tobramycin             S      R
SIE= Susceptible with Increased Exposure, S= Susceptible, R= Resistant
A microorganism categorised as SIE, indicates a high likelihood of therapeutic success when antibiotic exposure is increased by adjusting the dosing regimen or by its concentration at the site of infection. For dosing/dosage recommendations visit http://bit.ly/abstrep
***** FINAL REPORT *****
    
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### DIAGNOSIS & DIFFERENTIALS

Diagnosis

- Stage 4 pressure injury

Differential diagnoses

- Osteomyelitis
- Septicaemia

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### GOALS & MANAGEMENT PLAN

- Treat infection (systemic antibiotic therapy)
- Wound hygiene
- Control of exudate
- Protection of periwound skin
- Reduce wound-related pain
- Implement effective pressure injury prevention & management plan
- Optimise health-related quality of life

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### WOUND PROGRESSION

24 January 2024      12 April 2024      1 May 2024

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### WOUND PROGRESSION

21 May 2024      21 May 2024

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### EVALUATION

- Set treatment goals
- Aim for improved symptom control within 2 weeks
- Reassess every 2 weeks to monitor progress
- Pain management

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### WHEN TO REFER

- No signs of improvement within 2 weeks despite best practice
- Not healed within 4 weeks and/or deterioration
- Complicated wounds
- Signs of infection not responding to antimicrobial therapy
- Full thickness tissue injury
- Beyond your practice scope or just not sure what do

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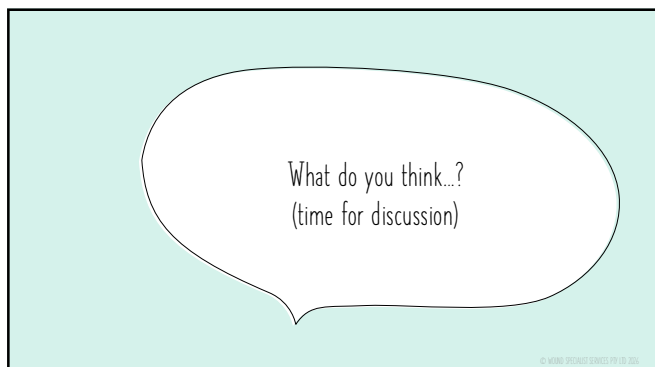
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### WHERE TO REFER

<http://gphn.org.au/patient-care/pathways/gold-coast-community-health-pathways/>

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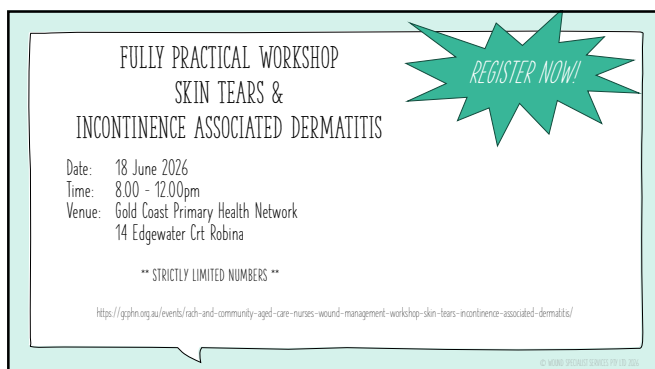
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