Wound Infection Pathway

This pathway outlines the steps to support the prevention and treatment of wound infections to improve patient outcomes.

Assess for wound infection[1]

Infection Prevention

Early intervention

Infection Treatment

Increasing Microbial Burden in the Wound

Contamination	Colonisation	Local Wound Infection		Spreading Infection	Systemic Infection
		Covert (subtle)	Overt (classic)		
• Microorganisms are present within the wound but are not proliferating • No significant host reaction is evoked • No signs of infection • No delay in healing is clinically observed	• Microorganisms are present and undergoing limited proliferation • No significant host reaction is evoked • No signs of infection • No delay in wound healing is clinically observed	• Hypergranulation • Bleeding, friable granulation • Epithelial bridging and pocketing in granulation tissue • Increasing exudate • Delayed wound healing beyond expectations	• Erythema • Local warmth • Swelling • Purulent discharge • Wound breakdown and enlargement • New or increasing pain • Increasing malodour	• Extending induration • Spreading erythema • Lymphangitis • Crepitus • Wound breakdown/ dehiscence with or without satellite lesions • Inflammation, swelling of lymph glands	• Malaise • Lethargy or nonspecific general deterioration • Loss of appetite • Fever/pyrexia • Severe sepsis • Septic shock • Organ failure • Death

Perform wound cleansing as per local guidelines

Take a wound sample

- Antibiotics as per culture sensitivities
- Determine review dates

Consider debridement & method used based on clinical need and local policy (e.g. Cutimed® DebriClean)

Debridement usually not required

- Use a topical antiseptic cleanser or surfactant soak
- Select debridement method on clinical need, goal, resources and local policy

Apply a wound dressing

Use non-active agent dressings with a physical mode of action that have an antimicrobial effect in high risk wounds* (e.g. Sorbact® Technology)
Use standard care dressings in low risk wounds

Use an active antimicrobial agent or a non-active agent dressing with a physical mode of action that have an antimicrobial effect (e.g. Sorbact® Technology) as per local policy

Following each review, document assessment and treatment, monitor progress and evaluate management

*Factors associated with high risk of infection overleaf

1 International Wound Infection, Institute (IWII) Wound, Infection in Clinical Practice. Wounds International. 2022 (adapted with permission)

essity

Factors associated with increased risk of wound infection

Individual (host) risk factors

- Poorly controlled diabetes
- Peripheral neuropathy (sensory, motor and autonomic)
- Neuroarthropathy
- Radiation therapy or chemotherapy
- Conditions associated with hypoxia and/or poor tissue perfusion (e.g. anaemia, cardiac disease, respiratory disease, peripheral arterial disease, renal impairment or rheumatoid arthritis)
- Immune system disorders (e.g. acquired immune deficiency syndrome)
- Connective tissue disorders (e.g. Ethlers-Danlos syndrome)
- Corticosteroid use
- Malnutrition or obesity
- Alcohol, smoking or illicit drug use
- Poor compliance with treatment plan

Wound Risk Factors

Acute Wounds

- Contaminated or dirty wounds
- Traumatic injuries
- Operation is classified as contaminated or dirty
- Inappropriate hair removal
- Operative factors (e.g. prolonged surgery, blood transfusion or hypothermia)

Chronic Wounds

- Duration of wound
- Large Wounds
- Anatomically located near a site of potential contamination (e.g. perineum or sacrum)

Acute and Chronic Wounds

- Foreign body presence (e.g. drains, sutures or wound dressing fragments)
- Haematomas
- Necrotic or sloughy wound tissue
- Impaired tissue perfusion
- Increased exudate and oedema that this not appropriately managed
- Wounds over bony prominences or probing bone
- Involvement of tissue deeper than skin and subcutaneous tissue (e.g. tendon, muscle, joint or bone)

Environmental Risk Factors

- Unhygienic environment (e.g. dust, unclean surfaces, or presence of mould/mildew)
- Hospitalisation (due to increased risk of exposure to antibiotic resistant microorganisms
- Inadequate hand hygiene and aseptic technique
- Inadequate management of moisture (e.g. due to exudate, incontinence, perspiration)
- Interface pressure that is inadequately off-loaded

6971/824

Adapted from International Wound Infection, Institute (IWII) Wound, Infection in Clinical Practice. Wounds International. 2022

essity