**Treatment of infected wounds with Anabact 0.75% w/w Metronidazole Gel**


The effect of topical 0.75% metronidazole gel on malodorous cutaneous ulcers

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**Abstract**

The unpleasant smell of infected fungating tumours and benign cutaneous ulcers is a distressing clinical problem, known to be associated with anaerobic infection. Topical metronidazole 0.8% gel has been shown to decrease smell from fungating malodorous tumours. This study was conducted to assess prospectively the subjective and bacteriological response to 0.75% metronidazole gel to decrease smell from these lesions and to assess whether bacterial contamination of the tubes of gel occurs during use. Forty-seven patients with benign or malignant cutaneous lesions associated with a foul smell were assessed for smell, pain, appearance, and bacteriological profile before entry and at 7 and 14 days. Forty-one (95%) of the 43 patients assessed at 14 days reported decreased smell. Anaerobic infection was initially found in 25 (53%) of patients and was eliminated in 21 (84%) of these. All review after 7 days, patients reported less pain from lesions. Discharge and associated celluli were also observed to decrease significantly.

**General application of Anabact 0.75% w/w Gel**

Gently spread over the wound with gloved finger or applicator. The unpleasant smell of infected fungating tumours, gravitational ulcers and decubitus ulcers.

**Dry dressing application of Anabact 0.75% w/w Gel**

Apply gel side of dressing to the wound. For the treatment of malodorous fungating tumours, gravitational ulcers and decubitus ulcers. Gently spread over the wound with gloved finger or applicator. The unpleasant smell of infected fungating tumours, gravitational ulcers and decubitus ulcers.

**Anabact 0.75% w/w Gel**

A pale yellow water based clear gel containing 0.75% w/w metronidazole for topical application.

**Uses:**
- For the treatment of malodorous fungating tumours, gravitational ulcers and decubitus ulcers.
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**For the treatment of malodorous**

- **Gravitational ulcers**
- **Decubitus ulcers**
- **Fungating tumours**

**Clinically shown to rapidly reduce pain and infection, as well as discharge and smell**

**Significant reduction in odour between 3 and 7 days**

**Treatment at a lower cost than similar products**
Clinicians are faced on a regular basis with:

- **Leg Ulcers (venous/arterial/mixed aetiology)**
- **Pressure Ulcers**
- **Diabetic Foot Ulcers**

ALL ARE SUSCEPTIBLE TO INFECTION

### What is a Leg Ulcer?

A leg ulcer is defined as the loss of skin below the knee brought about by the leg or foot, which takes longer than 2 weeks to heal. Venous leg ulceration (VLU) is due to sustained venous hypertension which results from chronic, various insufficiency and/or an impaired calf muscle pump. Leg ulcerations are susceptible to infection.

- Signs of infection can be:
  - increased pain and/or increased swelling
  - redness of skin around the ulcer
  - unpleasant-smelling discharge from the ulcer

### What is a Pressure Ulcer?

Pressure ulcers are caused when an area of skin and/or the tissues below are damaged as a result of being placed under sufficient pressure or distortion to impair its blood supply. Typically they occur in a person confined to a bed or a chair, as a result they are sometimes referred to as ‘bedsores’, or ‘pressure sores’.

- The skin may not be broken at first, but if the pressure ulcer gets worse, it can form:
  - an open wound or blisters (Category 2)
  - a deep wound that reaches the deeper layers of the skin (Category 3)
  - a very deep wound that may reach the muscle and bone (Category 4)

### What is a Diabetic Foot Ulcer (DFU)?

A foot ulcer can be defined as a localised injury to the skin and/or underlying tissue, below the ankle, in a person with diabetes. Foot complications are common in people with diabetes. It is estimated that 10% of diabetics will have a diabetic foot ulcer at some point in their lives. Patients with a loss of sensory neuropathy will have decreased awareness of pain and other symptoms of ulceration. Between 30%–60% of DFUs become infected and overall about 20% of patients with an infected foot will undergo a lower extremity amputation.

### Characteristics of chronic wounds such as leg ulcers, pressure ulcers and diabetic foot ulcers

- **Malodour and Infection**
  - Malodorous wounds are often polymicrobial, that is they contain both anaerobes and aerobes, and the level and type of bacteria present will affect the wound environment. Anaerobic bacteria that cause infection generate odor by fermenting compounds with a putrid or cadaverine. The odours emanating from such infected wounds will be obvious to anyone in close proximity to the patient and the odor is often described as acrid.
  - Traditionally, it was solely the presence of an odor that was seen as a sign of infection; however, a sudden increase in exudate levels may also indicate infection and can be associated with malodour.

- **Debridement**
  - is a process that occurs in all wounds and is crucial to encouraging healthy granulation tissue to form, and therefore their ability to remove malodours that are held there by weak electrical forces. It is important to completely seal the edges around the dressing to prevent the escape of odiferous agents.

- **Medicated treatments** - Malodour can also be managed through chemical control of the causative pathogenic micro-organisms. Past treatments have included various antiseptics such as hydrogen peroxide, Euxyl and acetic acid, but these have been shown to have a limited or even adverse effect on wound healing. The current treatments have largely been superseded by the use of topical metronidazole and other antibiotics oral preparations.

### Suitable Treatment Options

#### Metronidazole Gel

- **Successful reports of treatment of malodorous wounds using metronidazole gel first appeared in the late 1970s**.Metronidazole works by preventing bacterial replication through binding the bacterial DNA. Studies using metronidazole gel for treating malodorous wounds, reported reduction of wound between 1 and 30 days, with a significant improvement within the first week of treatment.

#### Dressings - Commonly used advanced dressings include:

- **Alginate dressings**, which are highly absorbent. The alginate gels when in contact with the wound surface, which helps clear out the wound, prevents it from drying and protects it from harmful bacteria and potential infection!

- **Film dressings**, which are permeable to water vapour and oxygen but not to water or microorganisms.

- **Foam dressings**, which normally contain hydrophilic polyurethane foam and are designed to absorb wound exudate and maintain a moist wound surface.

- **Hydrocolloid dressings**, which are occlusive and usually composed of a hydrocolloid matrix bonded onto an impermeable material, for example polymer film or foam backing. This matrix forms a gel that provides a moist environment which can help to promote the healing of wounds.

- **Hydrofibrous dressings**, which are occlusive and composed of a hydrofibrous matrix bonded onto an impermeable material, for example polymer film or foam backing. This matrix forms a gel that provides a moist environment which can help to promote the healing of wounds.

### Debridement

- **Debridement** is a process that occurs in all wounds and is crucial to encouraging healthy granulation tissue to form, and therefore their ability to remove malodours that are held there by weak electrical forces. It is important to completely seal the edges around the dressing to prevent the escape of odiferous agents.

### Always follow your local Wound Assessment and Management Guidelines

**Wound exudate is produced as a normal part of the healing process to prevent the wound bed from drying out. Fluid in the wound bed also helps tissue re-epithelialisation, cells to migrate and provides essential nutrients and growth factors for wound healing. If a wound that is prone to infection and/or has devitalised tissue, the wound exudate is more offensive than that seen in clean wounds**.

- In chronic wounds, such as pressure ulcers, a wound that is progressing to impaired healing, which may require the use of one or more treatments, can be managed through chemical control of the malodour.

- **Honey has**...

- **Hydrogel dressings**...

- **Debridement/cleansing**...

- **Systemic antibiotics**...

- **Management of exudate**...

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**Quinton R. Managing high malodorous wounds. Wound Essentials, 2002, 17(1)**

**Guidelines**

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