

CATEGORY: WOUND CLEANSING

OCTENILIN® PRODUCT RANGE

MAKING THE CASE

PRACTICAL STRATEGIES FOR WOUND BED PREPARATION

Effective wound cleansing is an important first step in wound bed preparation and a basic principle of modern wound management (Schultz, 2004). Clinicians must consider strategies that mount an adequate antimicrobial response while avoiding healing delay.

Irrigation solutions: Although tap water has not been shown to increase infection risk (Fernandez et al, 2010), irrigation solutions are designed for wound cleansing and so confer additional benefits. They usually contain surfactants that reduce the surface tension of the medium in which they are dissolved, increasing their ability to cover the wound surface, penetrate wound coatings, lift bacteria and debris, and suspend them in the solution (Harbs and Siebert, 2007; Vasel-Biergans and Probst, 2011; Lessing and McNulty, 2012; Cutting and Westgate, 2012; Kramer et al, 2013).

Wound gels: Wound hydrogels have a high water content (between 30–95%) and donate moisture to the wound surface, providing a moist environment that supports autolysis by loosening necrotic or sloughy tissue. Hydrogels are hypotonic, so osmotically enhance diffusion of patient-derived proteolytic enzymes and growth factors in the wound. Their moistening properties reduce the possibility of dressings adhering to the wound surface, minimising risk of pain and trauma (Dowsett and Newton, 2004). They also have a cooling effect in burns (Burd, 2007).

INTRODUCING THE OCTENILIN RANGE

The octenilin range offers rapid, effective and gentle cleansing and decontamination of wounds, even in difficult-to-reach areas.

- **octenilin® wound irrigation solution** cleanses and moisturises chronic wounds and burns, and loosens encrusted dressings, effectively and rapidly removing necrotic tissue, slough and debris, and preventing and removing biofilms. It is suitable for difficult-to-access areas, including fissures and wound pockets.
- **octenilin® wound gel** cleanses, moistens and decontaminates encrusted, contaminated or chronic wounds. It can be used on pressure ulcers, leg ulcers and any type of skin wound, alone or with the irrigation solution, to loosen difficult to remove wound coatings, moisten dry wounds and protect against microbial contamination (Chadwick et al, 2016).

CLINICAL EVIDENCE FOR THE OCTENILIN RANGE

Octenilin wound irrigation solution

Removes and prevents biofilm

- Effective against *Staphylococcus aureus* biofilms grown for 24 hours on a polystyrene surface, with an exposure time of 5 minutes sufficient for almost complete removal (Cutting and Westgate, 2012).
- Complete growth inhibition seen for *Staphylococcus aureus* on a polystyrene surface for up to 3 hours after coating with octenilin irrigation solution (Cutting and Westgate, 2012).

- Approximately 33.3% removal of *Pseudomonas aeruginosa* biofilms grown for 7 days after a contact time of 60 minutes (these results were expected due to the higher tenacity of *Pseudomonas aeruginosa*), indicating a need to repeat treatments to manage bacterial biofilm successfully (Harbs and Siebert, 2007).

Octenilin wound gel

Removes bacteria without delaying epithelialisation

- Safety and efficacy both demonstrated in a placebo-controlled, double-blind RCT for patients with superficial wounds requiring skin transplantation. At the end of the treatment period, the percentage of patients with a bacterial count >300 cfu on the wound surface was higher in the placebo group than the octenilin group. No delay was seen in wound epithelialisation in the octenilin group, demonstrating good tissue tolerance (Eisenbeiss et al, 2012).

A pain-free, efficacious option

- In a prospective, open-label study in chronic venous leg ulcers comparing the efficacy of octenilin wound gel alone, and combined with secondary foam dressings and phase-adapted dressings (including alginate or foam/silver for infected wounds), patients receiving octenilin wound gel alone or in combination had pain-free dressing changes and experienced a cooling effect. Both octenilin groups had a faster decrease in wound area compared with the phase-adapted dressings group (Strohal et al, 2013).

COST OF PRODUCTS WITHIN THE OCTENILIN RANGE

The cost of products in the octenilin range is comparative with competitor products, according to the following BNF pricing comparison.

	Octenilin product	Competitor product
Wound gel	£4.78 (20ml)	£6.12 (30ml)
Irrigation solution	£4.60	£4.66

References

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Explanation of how to use this guide: This document can be used to make the case for implementing effective prevention and management measures and may be supported by data from your own care setting. As well as economic impact, it is important to know the impact of interventions on patient quality of life and outcomes.

TOPICAL APPROACHES TO BIOFILM MANAGEMENT

Biofilms develop on wound surfaces and contribute to chronicity, delaying wound healing; they are present in the majority of chronic wounds (James et al, 2008), are often a precursor to infection (Percival and Bowler, 2004) with increasing tolerance to antimicrobials or antibiotics (Burmølle et al, 2010), and usually form where exudate is not under control (Hurlow, 2014). To address this, topical approaches should disrupt biofilm through regular and repeated debridement and vigorous cleansing (Phillips et al, 2010), removing harmful materials – such as exudate, devitalised tissue, loose debris and any dressing residues – from the wound surface.

Q DOES YOUR CURRENT WOUND CLEANSING STRATEGY EFFECTIVELY COMBAT BIOFILMS?

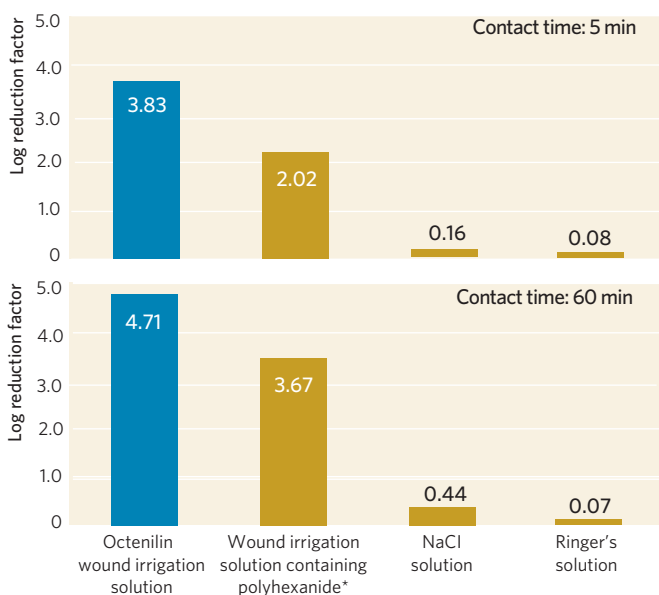
CLINICAL BENEFITS OF THE OCTENILIN RANGE

Excellent moisturising properties: octenilin wound irrigation solution contains ethylhexyl glycerine, which reduces the surface tension of the liquid, ensuring optimal moisturisation and cleansing of tissue surfaces, compared with other solutions (Figure 1) (Schülke & Mayr UK Ltd).



Figure 1: Moisturising properties of octenilin versus alternative solutions

Fast and effective cleansing: the cleansing action of octenilin loosens biofilms, and intensive, repeated irrigation washes them from the wound surface, leading to substantial germ reduction (Figure 2) (Schülke & Mayr UK Ltd).



* 0.02% polyhexanide

Figure 2: Action of octenilin on biofilms compared with alternative solutions

High levels of clinician satisfaction: After at least 1 month using octenilin irrigation solution and wound gel in 10 UK nursing homes, 25 experienced nurses completed a survey on their perceived effectiveness. The products were used over 200 times on at least 50 patients to treat mainly pressure and vascular ulcers. All clinicians agreed or strongly agreed with the following: 'very content with performance', 'very well tolerated', and 'very effective at cleansing wounds'; additionally, most agreed or strongly agreed with: 'reduced the need for antibiotics' (Wright, 2009).

Could your patients benefit from the rapid, effective and gentle cleansing action of octenilin, as reported by clinicians?

- ✓ "The products worked really well"
- ✓ "Good cleansing properties"
- ✓ "Does not seem to sting or irritate"
- ✓ "Seems to work straight away and shows improvement in days"
- ✓ "I will continue to use the products in future"

ECONOMIC BENEFITS OF THE OCTENILIN RANGE

A prospective, open-label study by Hammerle and Strohal (2014) examined the cost-effectiveness of octenilin wound gel for chronic venous leg ulcers (n=49), with dressing changes every 3-5 days. The three groups included in the study (octenilin wound gel alone, phase-adapted dressings alone, and phase-adapted dressings plus octenilin) were analysed in terms of treatment costs. Cost per patient was 27% lower in the octenilin wound gel group, with higher costs per patient demonstrated in the phase-adapted dressings alone group. Total treatment cost and average cost per patient were highest in this group, whereas in the octenilin wound gel alone group they were both most cost-effective.

PATIENT BENEFITS OF THE OCTENILIN RANGE

Octenilin is non-irritating and non-sensitising, reducing pain for the patient. It has been shown to confer no tissue toxicity, while also posing no impairment to granulation or epithelialisation. It can be used repeatedly in all wound situations, allowing the patient to receive an intensive, effective cleansing regimen with minimal risk of trauma. In a series of case studies published in 2016, all of the patients reported satisfaction with their treatment, commenting on wound progression and outcomes, pain reduction, and quality of life, including increased mobility and ability to socialise (Chadwick et al, 2016).

References (cont)

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