

Patient A, 72 years old



Before treatment



During application of IODOSORB (up to six dressing changes)



Wound healed (4 months and 1 week after start of treatment)

Patient B, 70 years old



After application of IODOSORB and before the use of sNPWT with PICO therapy



Wound healed (2 months and 1 week after start of treatment)

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IODOSORB[◇]

- » IODOSORB supports good wound bed preparation within the T.I.M.E.¹ continuum by its dual action antimicrobial and absorptive desloughing properties¹¹⁻¹³
- » IODOSORB combines high absorptive properties^{5,13} with a sustained antimicrobial iodine (0.9%) release.^{14,15} Cadexomer iodine beads absorb exudate, debris and bacteria and as the beads swell, iodine is released, providing antimicrobial activity for up to 72 hours^{11,16}
- » The beads dehydrate and physically address the mature biofilm matrix (*in vitro*) and the bacteria are subsequently killed by the iodine¹²
- » IODOSORB reduces microbial load^{14,17,18}, biofilm¹⁹, matrix metalloproteinases¹⁹, oedema, odour²⁰ and pain.^{14, 21, 22}

PICO[◇] therapy

- » PICO is a single-use NPWT device that helps promote wound healing in low to moderate exuding wounds
- » The PICO dressing with AIRLOCK[◇] technology is a four-layer dressing that ensures negative pressure is delivered to the wound bed and exudate is removed through absorption and evaporation.²³

NPWT mode of actions

- » Helps to reduce oedema²⁴⁻²⁷
- » Helps improve perfusion^{23, 27}, stimulating blood flow²³
- » Stimulates new granulation tissue formation^{23, 28-30}
- » Supports macro-deformation facilitating wound contraction.^{23,30}

Benefits of NPWT

- » Encourages an optimal healing environment^{24,27}
- » Reduction in wound area or 'wound contraction'^{23, 30}
- » Heals chronic wounds six times faster*¹⁰
- » The portable PICO system can be used in hospital and community settings, offering simplicity of use, affordability, reduced readmission and decreased hospital length of stay.³¹

*Based on 5 out of 9 wounds responding; wound mean duration prior to study 44 weeks; study size n=9.¹⁰

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IODOSORB[◇]

for wound bed preparation before using PICO[◇] system in hard-to-heal wounds



CASE STUDIES: USE OF PICO[◇] THERAPY AFTER IODOSORB[◇]

T: Tissue

M: Moisture management

I: Inflammation and infection

E: Edge of wound¹

Objectives

The clinician* evaluated the use of IODOSORB (cadexomer iodine) to lower bacterial burden and biofilm in various infected chronic wounds before using the PICO single-use negative pressure wound therapy (sNPWT) system.

Method

Case studies consisting of five patients aged 58 to 72 years with chronic wounds were conducted in 2016 in Catania, Italy. Three patients had diabetic foot lesions and two had vascular injuries. Biopsies were taken for all lesions and tested positive for bacterial infection of various species. The wound was surgically debrided and then IODOSORB powder was applied to manage bioburden. sNPWT with PICO was then applied for 5 weeks to assist with wound healing. Thereafter, a gelling fibre dressing and hydrocellular polyurethane foam was applied until the lesion had healed.

Results

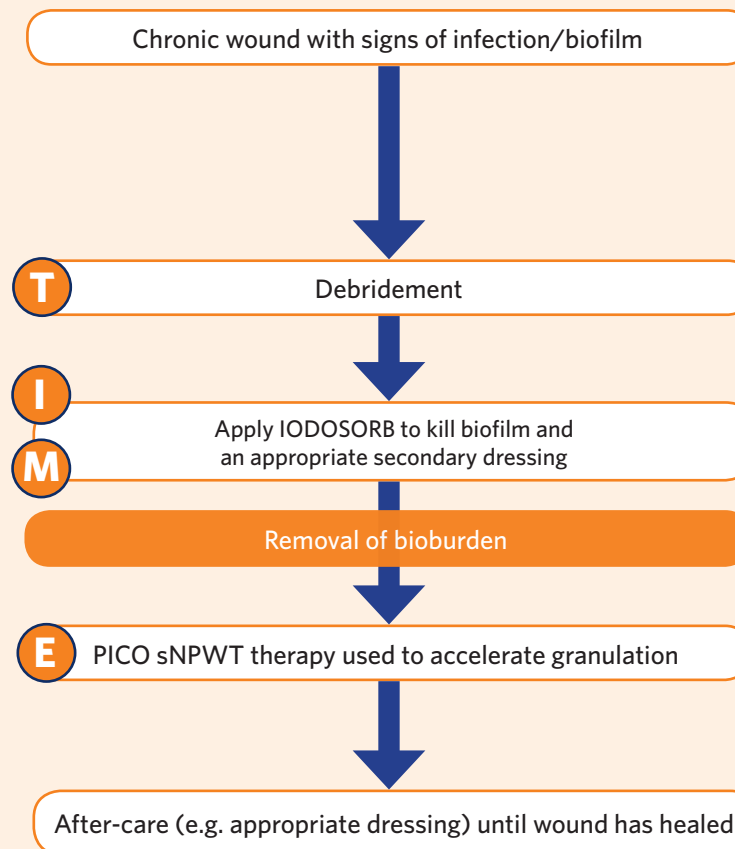
All five patients responded positively to the therapy. After the application of IODOSORB, purulent exudate was reduced after four dressing changes. After the sixth dressing change, biopsies were performed and all showed reduced bioburden. After the application of sNPWT with PICO, 70% of the tissue grew back.

Conclusion

The clinician of the case studies concluded that the treatment of infected chronic wounds with IODOSORB reduced the time to manage the infection and, followed by sNPWT with PICO, increased the speed of wound healing.

*Case studies reproduced with permission of M Vernaci MD, General Surgeon, ASP Catania, Italy

Steps taken by the clinician



Rationale for management

Biofilms are dynamic, heterogeneous bacterial communities that are difficult to eradicate. They are difficult to diagnose and treat² and have been linked to delayed healing in chronic wounds.^{3,4} Biopsies could be taken on the wound to identify bacterial species. The clinical signs of biofilm include low level inflammation, slow-healing wound, slough and moderate or no improvement with multiple rounds of oral antibiotics and recurrent infection. Most chronic non-healing wounds have biofilm present.³

Sharp debridement of the wound helps remove necrotic, devitalised tissue and planktonic or sessile microorganisms, reducing the biofilm burden. Debridement is one of the most important treatment strategies against biofilm, but it does not remove all biofilm. Therefore, an effective antimicrobial should be used after debridement.

The use of an effective anti-biofilm treatment, such as IODOSORB, can help promote autolytic debridement and effective wound bed preparation.⁵ The action of IODOSORB against biofilm has been proven across multiple challenging models⁶⁻⁸ (including independent research),⁷⁻⁹ showing an increased efficacy compared to silver-based antimicrobials.⁶⁻⁹

PICO therapy was selected to 'kick-start' the healing process of the slow-healing wounds. The benefits of NPWT include rapid wound contraction, removal of sloughy material, appearance of granulation tissue and overall reduction in wound volume. It reduces the number of dressing changes, due to its ability to manage exudate.¹⁰