Prontosan®

Type	Improved wound healing	Prevention and removal of biofilm	Antimicrobial activity	Cytotoxicity and tolerability	Quality of life	Cost-effective
RCT	●		●	●	●		

Evaluation of the efficacy and tolerability of a solution containing propyl betaine and polihexanide

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Objective
The objective of this randomized controlled trial was to investigate the effects of a wound cleansing solution containing polihexanide and betaine (Prontosan® Wound Irrigation Solution) in venous leg ulcers.

Methods
A portable device was used on the wound bed to assess surface pH, which has been shown to be one of the most useful non-invasive biophysical parameters in order to correlate the level of bacterial burden in different types of chronic wounds. In addition, patients were asked to self-assess subjectively the intensity of pain using a validated 10 mm visual analogue scale.

Results
Baseline pH on the wound surface (median range) was initially 8.9, and after 4 weeks of cleansing treatment and moist wound dressing was reduced and stable at 7.0 in the group treated with active cleanser. The pH value was significantly lower ($p < 0.05$) in this group compared to the control group at the end of the study. The treatment with the solution containing polihexanide and betaine (Prontosan® Wound Irrigation Solution) was well tolerated by the patients and was found useful in the absorption of wound odour. Pain was better controlled ($p < 0.05$) in the polihexanide and betaine group when compared to the control group.

Conclusion
Treatment with Prontosan® Wound Irrigation Solution can lead to a decrease in pH, which is a surrogate marker for bacterial burden and is well tolerated for the treatment of chronic ulcers.

Results of pH measurement in the wounds during the study period of 4 weeks.

pH value

- Prontosan® Wound Irrigation (n = 20)
- Normal saline (n = 20)   Control
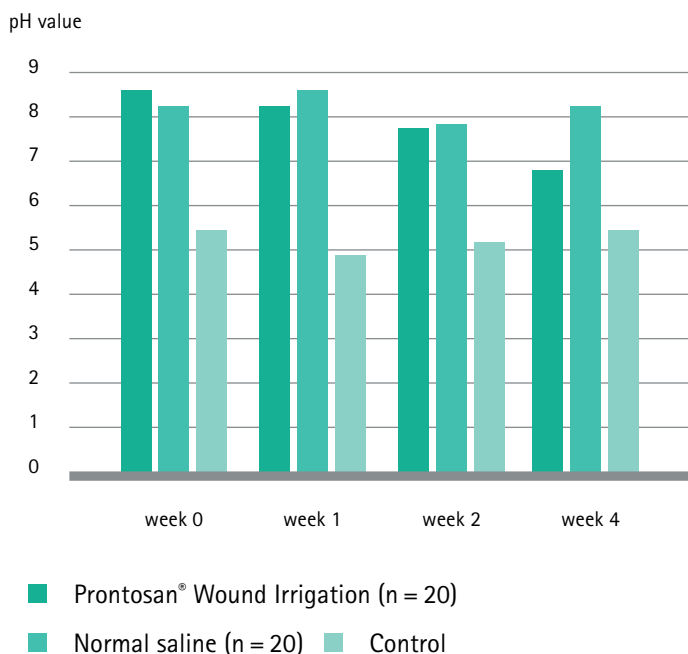
Pain evaluation during treatment of venous leg ulcers before and after 4 weeks of treatment with Prontosan® Wound Solution compared to standard therapy.

VAS (Visual analogue scale) score (mm)

- Prontosan® Wound Irrigation (n = 20)
- Normal saline (n = 20)

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