

The Effects of Hypochlorous Acid as an Adjunct to Treatment of Chronic Wounds

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Statement of Clinical Problem

Chronic wounds can take months to years to heal and are a substantial financial and clinical drain on the healthcare system. The cost of healthcare and morbidity rates are escalating due to chronic wound bioburden.¹ According to Fife, 2% of the general population has chronic non-healing wounds that are costing in excess of \$50 billion dollars per year to treat.² Because chronic wounds are present for long periods of time, they offer the ideal conditions to promote biofilm production, resulting in high bioburdens and delayed healing. Biofilm production is one of the most serious problems that exist with chronic wounds.

Sources

1. Armstrong DG, Bohn G, Glat P, et al. Expert Recommendations for the use of Hypochlorous Solution: Science and Clinical Application. *Ostomy Wound Manage*. 2015;61(5 suppl): 4S-18S.
2. Fife C, Carter M, Walker D, Thomson B. Wound care outcomes and associated cost among patients treated in US outpatient wound centers: data from the US wound registry. *Wounds*. 2012;24(1):10-17.

Description of Clinical Treatment Approach

This home health study was conducted in an attempt to mitigate the obvious problems that occur with chronic wounds and expedite the healing process. This study was initiated in the home healthcare setting with 11 patients with wounds that presented with high bioburden, delays in healing, challenging complications, and various co-morbidities. The study was performed over the course of 30 days. By the end of the study, 8 patients were still involved.

At the initiation of the study, 4 patients had infected wounds and 5 of the patients had necrotic tissue in the wound beds. All patients were receiving the following treatment regimen: quick daily cleansing with saline or a wound cleanser followed by the application of advanced wound care products including silver, SANTYL®, and carbon dressings.

The treatment regimen was changed to discontinue use of the saline/wound cleansers and to initiate the use of Puracyn® Plus Professional Formula Wound Irrigation Solution to cleanse the wound. The cleansing was followed by a 5 minute soak of Puracyn Plus and finally, application of advanced wound care products. Mechanical debridement was an additional part of the treatment regimen.

Patient Outcomes

Patients 1 – 7 experienced substantial decreases in wound size. Patient #1 had an 85% decrease in their wound, while Patient #2 had a 30% decrease in their wound. By the end of the study there were no patients who presented with wounds with bioburden, eschar, or odor.

Patient 1 - Venous Leg Ulcer



7/27 at intake

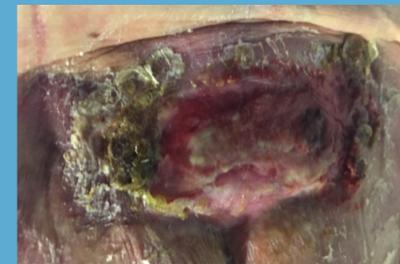


8/3



8/7

Patient 2 - Sacral Pressure Ulcer



7/27 at intake



8/3



8/17

Conclusion

Cleansing with Puracyn Plus and implementing a 5 minute soak prior to the treatments had a substantial beneficial impact on wound healing. Using Puracyn Plus to cleanse the wounds, as opposed to saline and commercial wound cleansers with surfactants demonstrated a 95% reduction in wound size and a reduction in chronic wound-related complications, resulting in healthier chronic wounds with faster healing times.