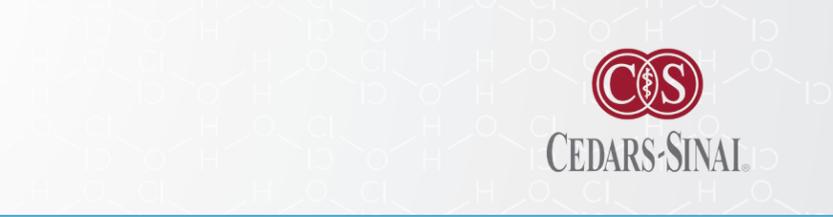


Hypochlorous Acid Solution: A Tale Of Two Clinics

A Safe Effective Alternative for Treating and Preventing Infection?



Kazu Suzuki DPM, CWS
Albemar Espirtu DPM, WCC

Statement of Clinical Problem

“Chronic wounds and the infections associated with them are responsible for a considerable escalation in morbidity and the cost of health care.”¹ Historically, preventing infections included the use of cytotoxic topical antiseptics, while treating infection was achieved by utilizing antibiotic and antimicrobial agents. While antibiotics can be a very helpful regimen in an effective wound care management program, not all chronic wounds require antibiotics.

Antibiotics are a major cause of recurrent infections and the “misuse and overuse of antibiotics in wound care is breeding resistant strains of “superbugs” that are becoming immune to all known types of antibiotics.”²

More and more physicians are relying on antibiotics as a “cure all” when other alternatives are available. In the past 15 years, hypochlorous acid solutions have shown to be as safe and effective for wound cleansing, and managing and treating infection as more commonly used hypochlorite solutions and antimicrobials.

Description of Clinical Treatment Approach

This study was conducted in two Wound Care and Surgical Centers from October 1, 2015 through November 30, 2015 (60 days). During the trial period, all other methods/products for wound cleansing were discontinued and hypochlorous acid solution was introduced for cleansing the wounds, followed by a 3-5 minute soak. This was the only method used for cleansing wounds prior to dressing changes. No other treatment changes were made during the trial period.

The intent of the study was to identify a safe yet effective alternative method for treating, managing and preventing infected wounds by using a more non-traditional cleansing agent for the wound prior to dressing application.

Sources

- 1 Sakarya, S. Gunay, N., Karakulak, M., Ozturk, B., Ertugrul, B. (2014, December). Hypochlorous acid: an ideal wound care agent with powerful microbicidal, antibiofilm, and wound healing potency. *Wounds*. 2014;26(12):342-350. Retrieved from <http://www.woundsresearch.com/article/hypochlorous-acid-ideal-wound-care-agent-powerful-microbicidal-antibiofilm-and-wound-healing>
- 2 Mindell, E., Hopkins, V. (n.d.). Natural Alternatives to Antibiotics. ShareGuide.com. Retrieved from <http://www.shareguide.com/alternatives.html>

Patient Outcomes

Clinic # 1:

- 60 days prior to trial, the clinic was treating 308 patients, 78 of which were receiving antibiotics.
- During the 60-day trial period, the clinic treated 316 patients, with only 46 patients receiving antibiotic therapy—a decrease in use on 32 patients.
- During the trial period, the clinic noted a reduction in the implementation and utilization of antibiotic therapy by 41%.

Clinic #2:

- 60 days prior to trial, the clinic was treating 108 patients, 10 of which were receiving antibiotics.
- During the 60-day trial period, the clinic treated 88 patients with 7 receiving antibiotic therapy—a decrease in use on 3 patients.
- During the trial period, the clinic noted a reduction in the implementation and utilization of antibiotic therapy by 30%.
- During trial period 27% of the treated wounds healed.

Conclusion

For this setting, cleansing with a hypochlorous solution, with 5 minute soaks prior to the treatments had a substantial beneficial impact on managing, preventing and treating infected wounds. Using the hypochlorous solution as part of a wound care regimen, cleansing the wound promoted quicker healing and decreased the use of antibiotics in 41% of the clinic’s patients.

While the use of hypochlorous acid solutions alone will not eliminate the need for antibiotics, it can supplement treatment, decrease healing times, eliminate undesirable side effects, and its use will not cause resistance to antibiotics.

Noted during this trial was a decrease in the use of advanced wound care products of 40% by the end of the trial period. Upon completion of the trial and implementation of the hypochlorous acid solution soaks, the use of advanced wound care products continues its downward trend.

Overall physician response was that the use of hypochlorous acid soaks decrease odor, produce a cleaner looking wound, eliminate the burning and discomfort experienced with normal cleaning procedures, was more effective than normal saline, and reduced the need for aggressive mechanical debridement.

Reduction in Antibiotic Therapy

