

2008 DFCON Poster

Authors: *Robert G. Frykberg, DPM, MPH*, Arthur Tallis, DPM, Edward Tierney, DPM
Carl T. Hayden VA Medical Center, Phoenix, AZ USA

Title: Wound Healing in Chronic Lower Extremity Wounds Comparing Super-Oxidized Solution (SOS) vs. Saline

Purpose:

Healing in chronic wounds is impaired due to an excessive inflammatory response and increased bacterial bioburden. A ph-neutral, non-toxic, SOS (Dermacyn®) has been shown to reduce the production of cytokines in mast cells and has broad-spectrum antimicrobial activity. We postulated that using this SOS may be beneficial over saline as the wound cleanser when treating these wounds.

Materials/Methods:

Patients were enrolled in this open-label study and randomized 1:1 to either SOS- or Saline- treatment. Local standard of care included debridement, off-loading, and daily wound care. Patients were followed weekly for two weeks, monitoring wound size, extent of epithelialization and other clinical assessments.

Results:

Clinically evaluable patients included 13 SOS and 10 Saline, with median wound size of 3.06 vs. 1.56 cm² respectively. All patients had diabetes and most wounds were present for at least 7 weeks. At week one, median wound size had decreased 45% to 1.68 cm² with 3 wounds 100% epithelialized in the SOS arm vs. 19% reduction in size to 1.26 cm² and no wounds 100% epithelialized in the saline group. At week two, 2 wounds were cured and 9 were 100% epithelialized in the SOS group compared to 0 cured and only 1 100% epithelialized in the Saline group.

Conclusion:

These data suggest that daily use of SOS may promote wound healing in chronic wounds when compared to saline.