

# **The Use of Micro Current and Autocatalytic Silver Plated Nylon Dressings in Human Burn Patients: A Feasibility Study**

**R. Huckfeldt, M.D., D. Mikkelsen, R.N., K. Larson, M.D.  
L. Hammond, O.T., B. Flick, M.D., C. McMakin, D.C.**

February 21, 2003

Proceedings of John Bowswick Burn and Wound Symposium in Maui, HI

---

**Background:** The use of autocatalytic silver plated nylon dressings (Silverlon®) as an antimicrobial agent in wound management is well documented in both animal and human studies. Also, the use of micro current in the treatment of wound healing in association with Silverlon has been shown to enhance silver release, improve anti-microbial properties of the silver, and increase wound epithelialization and healing in animal models.

**Study Design:** This prospective study was designed to test the feasibility of the use of micro current with Silverlon in wound care patients suitable for outpatient management. Six patients actively followed by the burn team were selected based on measurable end points. These end points included range of motion, skin sensitivity and scar discoloration. Pre-study measurements were taken and the test areas were then wrapped with Silverlon. After applying a return electrode frequency specific micro current was applied for sixty minutes each day for three consecutive days.

**Results:** All six patients had measurable changes in the areas treated with Silverlon and micro current. Follow-up measurements at one week and one month showed varying degrees of remaining response. No adverse effects were noted and no patient complaints associated with the micro current were identified at the time of the administration or in the follow-up time period.

**Summary:** The use of frequency specific micro current and Silverlon dressings is feasible and given the results of animal studies showing increased healing, further human trials directly measuring wound healing are warranted.