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Title: **Treatment and Healing of Chronic Wounds in Patients with Diabetes Mellitus Using a Combination Wound Therapy of Cell Proliferation Induction (CPI) And Other Standard Wound Care Protocols.**

Purpose: We present 3 cases of successful chronic wound healing in complicated diabetic patients using Cellular Proliferation Induction (CPI) by means of a novel radio frequency device (Provant®)

Materials/Methods: These three case histories were abstracted from medical records that included digital photographs of their lesions. The first patient had a large wound after open amputation of the great toe while the second two cases had multiple bilateral leg ulcerations. Each patient received standard wound care using debridement, offloading, compression, and standard topical wound care. Noninvasive CPI therapy was administered twice daily for 30-minute intervals to each wound.

Results:

The patients' chronic wounds responded to CPI therapy and eventually progressed to full closure. CPI therapy was found to promote the healing in both an ischemic diabetic foot wound as well chronic leg ulcers. In the sensate patient with venous ulcers, reducing levels of pain and edema were noted shortly after initiating the CPI therapy. In these three patients, granulation tissue rapidly developed.

Conclusions: While these results are anecdotal at present, we are encouraged by the results in these patients. Although CPI therapy has been found successful in managing decubitus ulcers, no such trials have been completed for diabetic lower extremity wounds. We recommend further study on the efficacy of this non-invasive modality on the healing of diabetes-related wounds.