

Title of Abstract:

Treatment of Acute and Chronic Diabetic Wounds Using a Combination of Pulsed Radio Frequency Energy (Provant®), Silver-based Dressings and Debridement

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ABSTRACT

Purpose: The incidence of lower extremity amputations among Diabetics is 10 times that of the general population. In 2002, >50,000 amputations were attributed to diabetes. Proper care of non-healing wounds is critical to prevent lower extremity amputations in these patients. In this report, we assess the potential for amputation avoidance among diabetic foot ulcer patients who are treated with adjunctive pulsed radio frequency energy therapy (Provant®).

Methods: We present two diabetic patients: a 59 year-old male with a 24 month-old right heel wound, and a 83 year-old male with a dehisced right foot metatarsal amputation. Pulsed Radio Frequency Energy (PRFE*) therapy was initiated as adjunctive therapy to standard institutional wound protocols, which included platelet-derived growth factor**, silver-based dressings*** and debridement. The patients treated themselves with PRFE at home (30 minutes bid) and received daily dressing changes.

Results: Both patients responded to PRFE therapy. The 59-year old male healed completely in 5 months at a rate of 1.1 mm²/day, and the 83 year-old male with a dehisced metatarsal amputation almost healed in two months, progressing from 7.0 cm³ to 0.09 cm³ in 60 days at a rate of 1.2 mm²/day.

Conclusions: PRFE therapy promotes the healing of Diabetic Ulcers in an out-patient wound clinic setting. PRFE therapy may have avoided an amputation in the 59 year-old male and prevented a further amputation in the 83 year-old patient.

*Provant®, **Silvadene®, *** Regranex®