Utility of a Microcurrent Generating Device in Surgical Dehiscence Wounds of Varying Etiology

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Background

Despite the array of advanced wound care options available on the market, surgically dehisced wounds continue to present a therapeutic challenge to the practitioner. When primary closure methods fail, there is need for efficacious solutions to reduce chance for infectious complications and expedite healing. A growing evidence base supports the use of the microcurrent generating device* in enhancing healing outcomes of both acute and chronic wounds (1-2).

Methods

A case series was conducted to document experience with MCD in the treatment of surgically dehisced wounds. The effects of the MCD were assessed in the following patients: 1) an abdominal wound dehiscence; 2) a painful ulceration at an ileostomy site; 3) a gangrenous infected surgical dehiscence of the foot following toe amputation; 4) a surgical incision dehiscence following AKA; and 5) two dehisced surgical incisions on the anterior and lateral lower leg.

Results

Successful wound healing was achieved in all cases that had failed to respond positively to advanced wound healing modalities, including NPWT and silver dressings. Of the 3 painful wounds, all patients had decreased pain medication usage following application of the MCD. In cases 1-2, the patient was allowed to return home to continue her role as primary caregiver; the decrease in pain and the resolution of the ulceration allowed her to be properly fitted for an ileostomy containment system; Cases 3-4 were allowed to return home; Case 5 went on to undergo TKR.

References


*Viewed as an Antibacterial Wound Dressing; Kinetic Wound Care, Inc., Tenneva, AL

Conclusion

These observations further support the wound healing potential of the MCD in open wounds. Findings from this series point to the use of a microcurrent-generating device as a valuable tool for the induction of wound healing in various complex wounds.