

CASE STUDY

Debridement and amnion injections in a non-healing diabetic foot ulcer

Doug Toole, DPM

Dr. Toole, co-owner of the Innovation Medical Group in Salt Lake City, is a certified podiatrist through the American Board of Podiatric Medicine.

“With Snapshot^{NIR} we are able to demonstrate the efficacy of an innovative treatment plan in a difficult clinical scenario, helping drive patient compliance while restoring tissue viability in wound healing.”

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CASE HISTORY

An 85-year-old female patient with a history of diabetes, vascular disease and dementia presented at the clinic with a diabetic ulcer on the lateral side of her left foot. After several clinical evaluations, the wound had progressed towards closure, but it stalled with a 0.5 cm opening at the end of initial treatment. Near-infrared spectroscopy (NIRS) imaging (Snapshot^{NIR}, Kent Imaging) was used to track and document the level of oxygen saturation (S_tO_2) in the wound. This information was used to guide a change in the course of treatment to affect a more effective wound healing process.

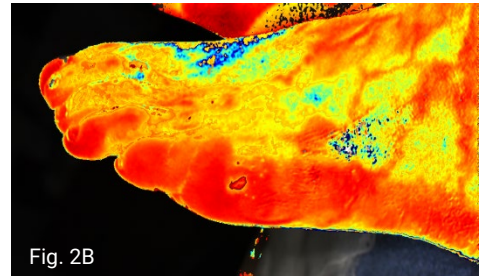
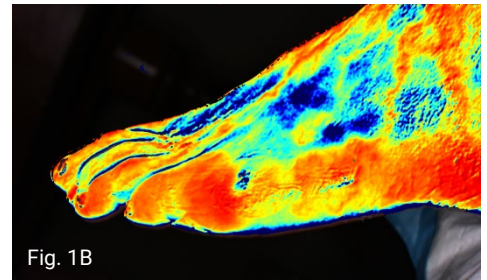



FIGURE 1-Baseline clinical (1A) and S_tO_2 (1B) images before serial allograft applications

FIGURE 2-One month after continuous treatment: clinical (2A) and S_tO_2 (2B) images. Note the change (increase) in tissue oxygenation at the wound and peri-wound sites, as well as on the dorsal aspect of the foot with treatment.

OBSERVATIONS

Rapid objective assessment with Snapshot^{NIR} revealed a lack of tissue viability at the lateral side of the left foot helping to explain why the wound was not closing entirely after initial treatment. As a result of this new insight, the clinician immediately altered the treatment plan to help close the wound. The new course of action included a combination of repeated debridement and amnion injections to stimulate vascular neo-genesis. To track and document the wound healing progression, serial imaging was captured using Snapshot^{NIR}. After one week of treatment, the S_tO_2 images captured demonstrated that the area of previous concern was showing improved oxygenation. Debridement and amnion injections were continued for a month until the wound finally closed. This approach saved both time and money and resulted in a much better outcome. 

Snapshot₂^{NIR}

Seeing is Believing in Wound Care

Portable for All Points of Care

Rapid Assessment

Quickly and easily assess the wound bed and surrounding tissue without the use of dyes or patient contact.

Wound Debridement

Clearly identify non-viable tissue in and around the wound bed. Repeat imaging as needed to confirm graft survival.

Wound Monitoring

Ability to assess dehiscent, chronic or slow healing wounds in conjunction with hyperbaric pressure or other treatments without the need for injections or patient contact.

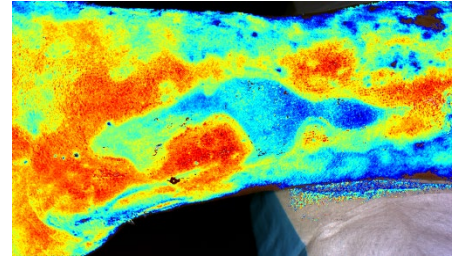
Documentation and Tracking

Track and compare the same patient throughout their care. Assess patients where you see them to record treatment progress and evaluate effect of the treatment modality.

Patient Compliance

Share images with patients to provide visualization of treatment progress. Encourage patients through treatment and therapy.

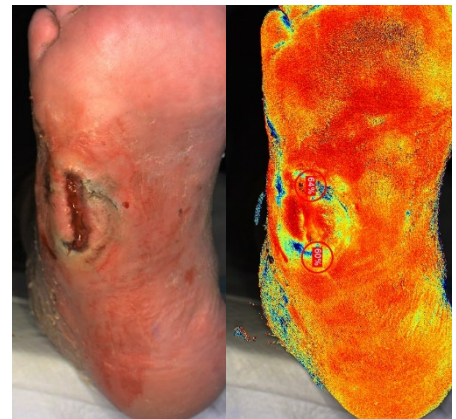
Venous Leg Ulcer Assessment



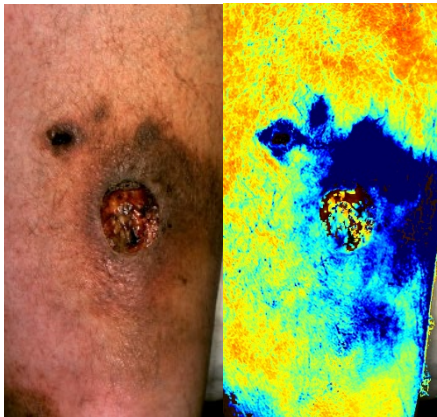
Pre-Debridement



Post-Debridement



Pre-Compression Therapy



Post-Compression Therapy

