A 62-year-old female was admitted to the hospital with a hardware-related infection, osteomyelitis, and wound breakdown 5 months after an open reduction and internal fixation surgery of a left tibia-fibula fracture (Figure 1). Patient comorbidities included hypertension, rheumatoid arthritis, and fibromyalgia. The wound had been previously treated with intravenous antibiotics, multiple surgical debridements, and conventional negative pressure wound therapy (NPWT) for 5 months while waiting for fracture ossification. The patient was readmitted twice for surgical debridement and intravenous antibiotics for osteomyelitis prior to a consultation with the plastic surgery department.

The patient was readmitted to the hospital for debridement and discharged with standard V.A.C.* Therapy using V.A.C.® GRANUFOAM™ Dressing. A non-adherent cover layer was placed to protect the tendon prior to application of NPWT. Dressings were changed every 48-72 hours. V.A.C.* Therapy continued for 20 days (Figure 2).
After 20 days of V.A.C.® Therapy, the patient was readmitted to the hospital for treatment non-adherence. Due to concerns regarding tendon and hardware exposure, no further surgical debridements could be performed. V.A.C.® Therapy was discontinued in favor of V.A.C. VERAFLÓ™ Therapy using V.A.C. VERAFLÓ CLEANSE CHOICE™ Dressings applied at the bedside. The wound was instilled with 20 mL of quarter strength Dakin’s solution with a 5-minute dwell time, followed by 2 hours of continuous negative pressure (-125 mmHg). Dressings were changed every 72 hours. After 7 days of V.A.C. VERAFLÓ™ Therapy (Figure 3), the patient underwent limited surgical debridement and application of a split-thickness skin graft.

V.A.C.® Therapy using V.A.C.® Dressing with a non-adherent cover layer was applied as a bolster over the skin graft. V.A.C.® Therapy continued for 21 days, with dressings changed every 72 hours. After 21 days, V.A.C.® Therapy was discontinued, and local wound care was initiated using a sterile petrolatum gauze dressing and a conforming bandage. At the follow-up (1 month after skin grafting), the wound remained infection-free and showed signs of 100% graft take (Figure 4).

Photo and patient information courtesy of Laura A. Sudarsky, MD, CWSP, FACS and Tracey H. Stokes, MD, FACS, eSSe Plastic Surgery, Fort Lauderdale, FL, and Broward Health Medical Center, Fort Lauderdale, FL.

Note: As with any case study, the results and outcomes should not be interpreted as a guarantee or warranty of similar results. Individual results may vary, depending on the patient’s circumstances and condition.

NOTE: Specific indications, contraindications, warnings, precautions, and safety information exist for KCI products and therapies. Please consult a clinician and product instructions for use prior to application. Rx Only.