

InnovaBurn™

Case Study



Triad Life Sciences® is a biotech company dedicated to increasing patient access to innovative, reliable and affordable technologies that address acute, traumatic, and chronic wounds, surgical applications, soft tissue injuries, and other regenerative applications.



Partial Thickness Burn in a Diabetic Patient

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Products Used:

InnovaBurn™

Wound Type:

Partial Thickness Burn

Applications: Four

Time to Close: Five weeks

Patient and Diagnosis:

An 80-year-old man presented with new blistering and swelling of the great toe of his right foot. Patient did not remember any specific trauma but does use a space heater. Physical exam revealed serous-filled blisters on the plantar aspect of the hallux, 2nd and 3rd toes, and the dorsal aspect of the hallux. Burn injury did not appear to be full thickness.

Comorbidities:

Diabetes Mellitus, Polyneuropathy, High Blood Pressure, Stage 3 Kidney Disease

Prior Treatment History:

All blisters were deroofed and covered with gentamicin cream and bandages. The patient was also prescribed clindamycin TID. Bandages were changed once before the follow-up appointment two days later (*Images 1A & 1B*).

Wound Treatment and Outcome:

At the first follow-up appointment, the wounds on the right hallux measured 5.3cm (length) by 7.4cm (width) by 0.1cm (depth) (*Image 2A*) and the wounds on the 2nd and 3rd toes measured 3cm (length) by 3cm (width) by 0.1cm (depth) (*Image 2B*). All wounds were cleansed and covered with InnovaBurn™, which was secured with wound closure strips, antibiotic cream, and a final dressing. Six days later, the wound on the right hallux measured 6cm (length) by 10.5cm (width) by 0.1cm (depth) (*Image 3A*) and the wounds on the 2nd and 3rd toes measured 4cm (length) by 2.9cm (width) by 0.1cm (depth) (*Image 3B*). All wounds were again cleansed and covered with InnovaBurn™, which was secured with wound closure strips, antibiotic cream, and a final dressing. One week later, the wound on the right hallux measured 4.1cm (length) by 6.1cm (width) by 0.1cm (depth) and the wounds on the 2nd and 3rd toes measured 2.5cm (length) by 2cm (width) by 0.1cm (depth). All wounds were cleansed and covered with InnovaBurn™, for a third time, which was secured with wound closure strips, antibiotic cream, and a final dressing. One week later, the wound on the right hallux measured 4.5cm (length) by 5.5cm (width) by 0.1cm (depth) (*Image 4A*) and the wounds on the 2nd and 3rd toes measured 1.5cm (length) by 1.5cm (width) by 0.1cm (depth) (*Image 4B*). All wounds were cleansed and covered with InnovaBurn™, which was secured with wound closure strips, antibiotic cream, and a final dressing. One week later, the wound on the right hallux was isolated to the distal-most portion of the great toe and the wounds on the 2nd and 3rd toes had almost closed completely. The distal tip of the hallux appeared gangrenous with minimal soft tissue coverage. Patient was sent for an MRI and vascular studies to assess distal hallux for osteomyelitis and viability. One week later, the wound on the right hallux had only a small ulceration at the distal tip (*Image 5A*) and the wounds on the 2nd and 3rd toes had completely closed (*Image 5B*). The imaging study confirmed osteomyelitis and the vascular studies confirmed adequate blood flow, so the patient was scheduled for a partial hallux amputation with complicated wound closure.



Image 1A: Dorsal wound following initial deroofing; Image 1B: Plantar wounds following initial deroofing



Image 5A: After four applications of InnovaBurn™ over five weeks, a small ulceration at the distal tip of the hallux remained, which required partial amputation; Image 5B: The wounds on the 2nd & 3rd toes had closed completely



Image 2A: Prior to the first placement of InnovaBurn™, the hallux wound measured 5.3cm x 7.4cm x 0.1cm; Image 2B: The wounds on the 2nd & 3rd toes measured 3cm x 3cm x 0.1cm



Image 3A: Prior to the second placement of InnovaBurn™, the hallux wound measured 6cm x 10.5cm x 0.1cm; Image 3B: The wounds on the 2nd & 3rd toes measured 4cm x 2.9cm x 0.1cm



Image 4A: Prior to the fourth placement of InnovaBurn™, the hallux wound measured 4.5cm x 5.5cm x 0.1cm; Image 4B: The wounds on the 2nd & 3rd toes measured 1.5cm x 1.5cm x 0.1cm

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