

# TOTAL CONTACT CAST – THE GOLD STANDARD FOR OFF-LOADING AND HEALING DIABETIC FOOT ULCERS

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## BACKGROUND AND PURPOSE

Foot ulcers are the leading cause of non-traumatic lower extremity amputations. Off-loading and redistributing pressure is the main principle involved in the treatment and prevention of foot ulcers and lower extremity amputations. Evidence has shown Total Contact Casts (TCC) to be the gold standard of treatment in relieving pressure and healing diabetic foot ulcers. The cast equalizes pressure loading of the plantar surface by equalizing the contact of the cast material with plantar skin. The case studies presented will provide further evidence of why the TCC is the gold standard in off-loading and healing diabetic foot ulcers.

## METHODS

All patients had multiple co-morbidities with chronic foot ulcerations varying in longevity. Thorough education was provided to the wound center staff regarding the purpose and use of the TCC system. Wounds were debrided and dressed according to advanced wound care evidence based practice. All patients were placed in the TCC system to off-load pressure to chronic foot ulcers.

## RESULTS

All 3 patients achieved complete wound closure. Average rate of healing with use of the TCC system was 45 days, ranging from as few as 35 days to as many as 62 days.

## CONCLUSIONS

The case studies prove use of the TCC system can positively impact healing rates of patients with chronic foot ulcers and multiple co-morbidities.

### CASE 1

41 year old female with co-morbidities of peripheral neuropathy, alcohol dependence, vitamin B<sub>12</sub> deficiency, anemia, MI, and tobacco use. She was being cared for by her primary care physician for 7 months without any improvement prior to initiation of the TCC system.

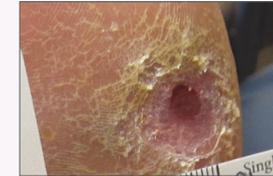
**Patient Outcomes:** Wound was 100% healed 35 days after initiation of TCC system



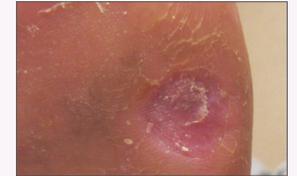
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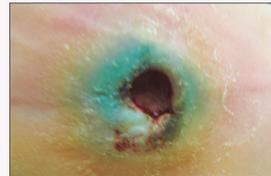


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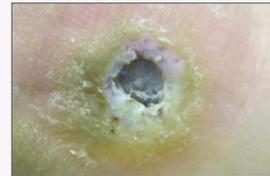
### CASE 2

66 year old female with co-morbidities of Diabetes Type 2 for 25+ years, Charcot foot deformity, CHF, chronic kidney disease- dialysis dependent, and hypertension. Patient was being treated by Podiatry for 5 months without any improvement prior to initiation of TCC system. Previous treatments included surgery, wedge shoe, silver alginate dressings, debridement, and living skin substitutes.

**Patient Outcomes:** Wound was 100% healed 62 days after initiation of TCC system



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### CASE 3

53 year old male with co-morbidities of Diabetes Type 2, hyperlipidemia and hypertension. Patient had the wound >1 month prior to evaluation by PCP. He was referred to the Wound Center where use of the TCC system was initiated along with a 2 week course of antibiotics.

**Patient Outcomes:** Wound was 100% healed 38 days after initiation of TCC system



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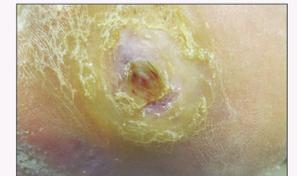
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