# Total Contact Cast Experiment In Borneo

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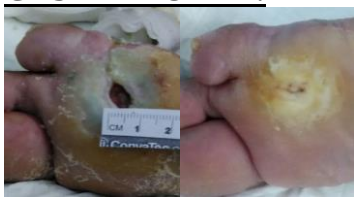
## INTRODUCTION

Over recent years, studies have shown that Total contact cast (TCC) is the gold standard treatment in diabetic wound care management. The theory behind this is by off-loading pressure from the wound, it is protected and allowed to heal. However, in this series of case reports we selected non diabetic patients who has chronic plantar wound. TCC was applied and wound was followed up weekly; measuring wound size and granulation tissue.

## CASE REPORT 1:

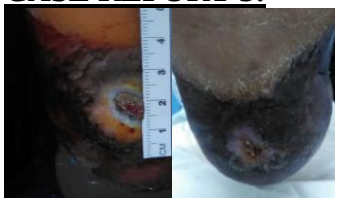


Mr V, a 73 year old with chronic ulcer of left foot secondary to burn injury for 6 years. He underwent wound debridement and virtual amputation of left 3rd toe two weeks before TCC was applied. His wound now smaller with TCC.

## CASE REPORT 2:

Mr K, a 40 year old had chronic wound post Split Skin Graft (SSG) and debridement for necrotising fasciitis. His first experiment with TCC was complicated with soft cast due to exudative wound. However, he was restarted on TCC once his exudative wound better. Currently, his wound healed with total contact insole.

## CASE REPORT 3:



Mr P, a 53 year old sustained chronic wound post SSG and debridement due to degloving injury of right heel in 2010 following a motor vehicle accident. He is benefiting from TCC Easy since he was non compliant to TCC (POP). His wound now healing with total contact insole.

## DISCUSSIONS

The purpose of a TCC is to transfer weight from the bottom of the foot to the lower leg thus offloading pressure from the wound. It can reduce the complete closure of wound to a mean of 10 weeks.[1] Another study showed 88% consistent healing of active diabetic foot ulcer in a range of 43 days.[2] However, after the wound healed, patients are required to wear total contact insole to prevent formation of new pressure ulcer.

From the case studies, patient with chronic ulcer regardless post SSG or debridement showed good healing after TCC. But bear in mind, wound with heavy exudate are contraindicated for TCC. Hence it explains why one of our patient had delayed wound healing by 10-20% in size reduction compared to the others.

TCC Easy showed advantages in patient mobility and quality of life due to its lighter material than TCC (POP). It is most suitable for an active patient as it is more durable and water resistant. In contrast, a study comparing between removable (TCC Easy) and nonremovable TCC (POP) favors nonremovable by more than 50%.[3]

## CONCLUSION

Although TCC is the gold standard for diabetic foot ulcer, we also recommend the application of TCC for non diabetic patients with chronic foot wound. TCC Easy also had some role in active patient.

## REFERENCES

[1] Management of clinical diabetes. Sign Scottish National Guideline. Sept 2013

[2] Boulton AJM et al; Neuropathic diabetic foot ulcers. N Engl J Med. 2004; 35

[3] Partha et al. A Comparative Study Between Total COntact Cast and Pressure-relieving Ankle Foot Orthosis in Diabetic Neuropathic Foot Ulcers. J DIabetes Sci Technol. Mar 2015; 9(2): 302-308