

J Orthop Surg (Hong Kong). 2018 May-Aug;26(3):2309499018802486.

Total contact casting versus traditional dressing in diabetic foot ulcers.

Sahu B<sup>1</sup>, Prusty A<sup>1</sup>, Tudu B<sup>1</sup>.

This study compared the treatment of total contact casting (TCC) with traditional dressing treatment (TD) in the management of neuropathic diabetic plantar ulcers. Thirty-one patients with plantar ulcers without any gross infection, osteomyelitis or gangrene were randomly assigned to the TCC group (n = 15) or TD group (n = 16). In the experimental group, TCC was applied on the initial visit and subjects were instructed to limit ambulation to one-third of their usual activity. Subjects in the control group (TD) were prescribed dressing changes and were advised against bearing weight on the involved extremity. Ulcers were considered healed if they showed complete skin closure with no drainage. Ulcers were considered not healed if they showed no decrease in size by 6 weeks or if infection developed requiring hospitalization. In the TCC group, 12 of 15 ulcers healed in  $48 \pm 7$  days; in the TD group, 10 of 16 ulcers healed in  $58 \pm 9$  days. Comparatively higher rate of ulcer healing with fewer infections was seen in the TCC group. We conclude TCC is a more effective method than dressing for treating diabetic plantar ulcers reducing the risks of amputation.