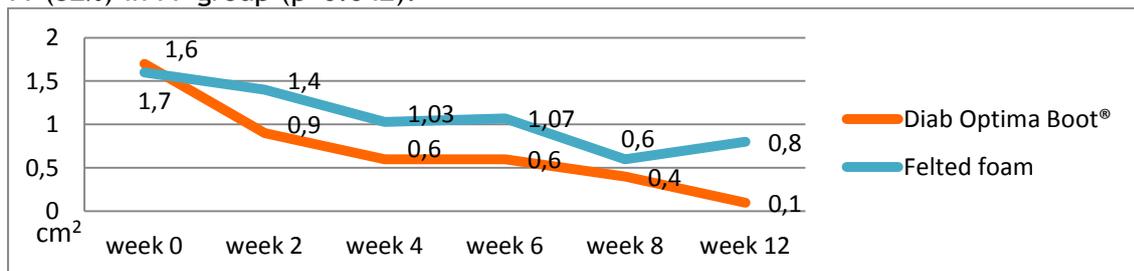


Efficacy of an off-the-shelf instant contact casting versus felted foam on neuropathic diabetic foot ulcers off-loading.

Álvarez-Madroñal R, Sanz-Corbalán I, Lázaro-Martínez JL, Aragón-Sánchez FJ, García-Morales E, García-Álvarez Y Diabetic Foot Unit. Univer Complutense de Madrid. Spain

Introduction: Offloading is critical on the management of diabetic foot ulcers (DFU) However nowadays DFU's offloading is poorly implemented and in some case absence. For instance, in some countries like Spain using felted foam (FF) with a surgical half-shoes is the more frequent offloading strategy on DFU. **Aims:** to assess the efficacy of a removable cast walker device Optima[®] Diab Device (ODD) versus felted foam DFU's offloading. **Methods:** 35 patients with plantar DFU were follow-up weekly, n=14 were treated with ODD and n=21 with FF. Ulcer area was determined using a bilayer acetate and was measured by Visitrack[®] device. Ulcer area reduction in two off-loading devices among 2, 4, 6, 8 and 12 week period was compared. The average suffering time from the ulcer at the beginning of the study was 15.8 ± 8.9 weeks in ODD vs 17.3 ± 13.4 weeks in FF group. Ulcers were classified using Texas University Classification. **Results:** The median baseline ulcer area was $1.7 \pm 1.7 \text{ cm}^2$ in ODD group and $1.6 \pm 1.6 \text{ cm}^2$ in FF group ($p=0.61$). Ulcer area reduction was greater in ODD group at the second and fourth week ($p=0.003$ and $p=0.028$ respectively). Not significant differences were found between both groups at the sixth and eighth week ($p>0.05$). At 12 weeks, 12(86%) patients healed in ODD group vs 11 (52%) in FF group ($p=0.042$).



Conclusions: Optima[®] Diab Device is more efficacy than felted foam when comparing ulcer area reduction and healing rates during 12 weeks follow up in patients with DFU. ODD represents a new alternative off-loading which improves patient comfort, avoids contraindications and reduces cost versus traditional methods.