An evaluation of a non-adhesive hydropolymer* foam dressing on patients with differing wound aetiologies

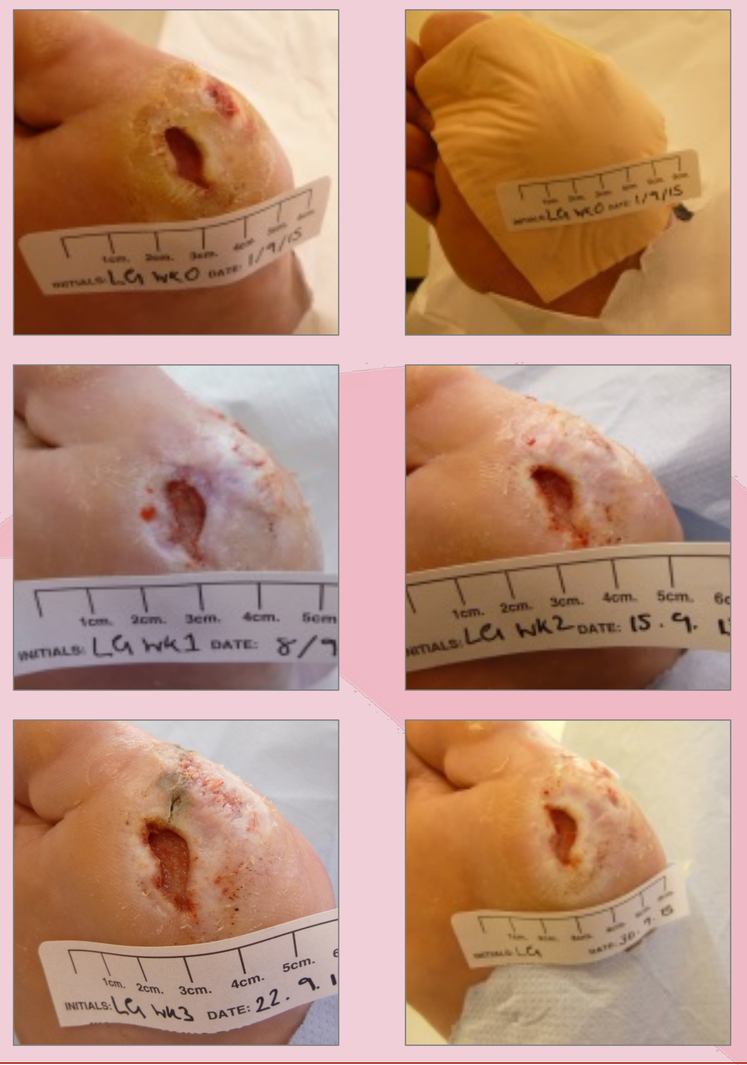
Jones NJ, Hagelstein SM, Ivins NM, Walkley NA, Harding KG CBE, Welsh Wound Innovation Centre

WELSH WOUND INNOVATION
ARLOESEDD CLWYFAU CYMRU

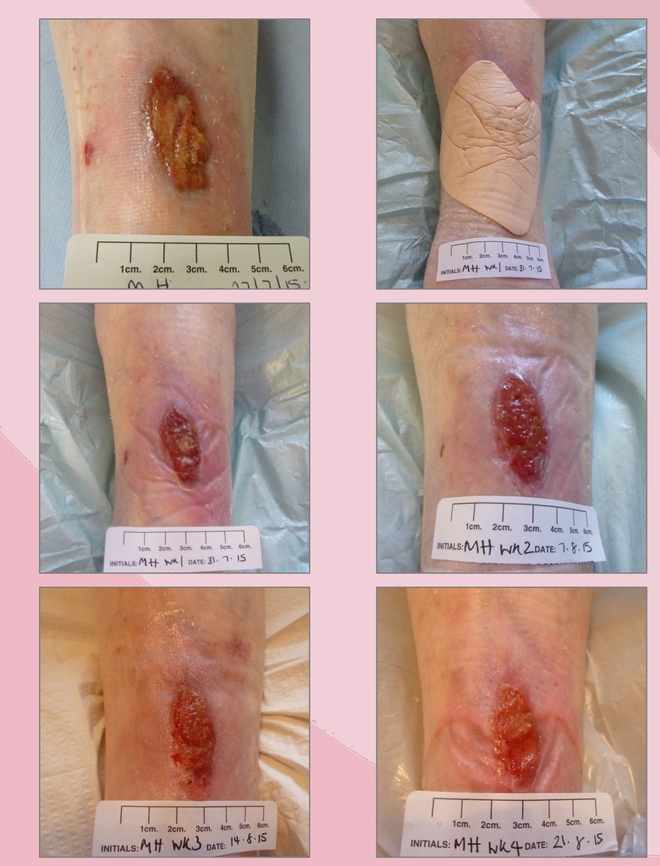
Introduction: The primary aim was to evaluate a non-adhesive hydropolymer foam dressing with LiquaLock® Advanced Absorption Technology on patients with low to highly exuding wounds. The secondary aim was to review the conformability of this cuttable non-adhesive foam dressing on patients with fragile skin integrity surrounding the wound edge.

Method: Patients recruited into the case series evaluation had wounds of varying aetiology which presented predominantly with low to moderate exudate levels and had no clinical features of infection. They were considered suitable for the application of a non-adhesive foam dressing over any adhesive foam backed dressing due to the fragile integrity of the surrounding skin. Patients were reviewed over a four week period where standard care was provided and objective measures, including wound tracings and photographs, were performed once a week.

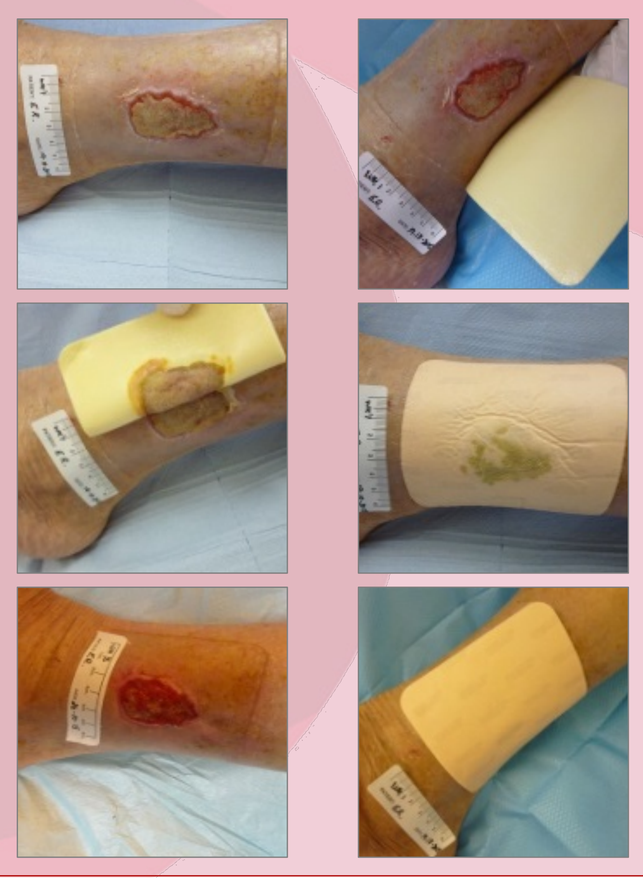
Case 1: A 60 year old gentleman with a medical history of diabetes and peripheral neuropathy. He has suffered with recurrent ulcers to the same region for the past 8 years. On assessment the wound measured 2.0 x 1.0 x 0.3 cm, the wound bed was granulating with the wound edges surrounded with callus. The team decided to use the non-adhesive hydro-polymer foam dressing. Mr G was followed for 4 weeks, at each assessment the surrounding callus was debrided and a new dressing applied. This gentleman, and the clinicians, found the dressing easy to apply and they conformed well to the area of the wound. At the end of the four weeks the wound had reduced in size to 1.2 x 0.4 x 0.1 cm.



Case 2: A 73 year old lady with a history of diabetes and hypertension presented with a traumatic lower leg wound. The wound had been present for 11 months and shown no progression in the previous 4 weeks. The main clinical problem had been recurrent infection and wound-related pain. On initial assessment the wound presented with an indolent wound bed of which 70% was over-granulating. The wound measured 4.2 x 2.0 cm and exudate level was moderate. Dressing changes were conducted twice weekly and Mrs H continued with her multi-layer compression system. By week 4 the over-granulating tissue had resolved and the wound measured 3.4 x 1.5 cm. The pain reported by the patient had decreased. There were no peri-ulcer skin complications. The dressing was easy to apply and remove and caused no trauma. The patient reported that the dressing was comfortable and she was satisfied with the outcome.



Case 3: An 84 year old lady with a medical history of atrial fibrillation, hypertension and hypothyroidism for which she is medicated. Mrs R presented at clinic with a traumatic leg ulcer following a knock to her leg from a car door. She had been treated for a haematoma which had broken down and had been static for 5 months. On assessment at the clinic the clinicians decided to use the non-adhesive hydro-polymer foam dressing. The wound bed was over granulating, sloughy and measured 4.0 x 2.5 cm. Dressing changes were carried out three times a week. The patient found the dressing comfortable to wear and conformed well to the ulcer site and leg. Mrs R also remarked the pain had reduced and the exudate was confined to the dressing which meant her clothes and bedding were not needing changing daily. By week 3 the wound was 100% granulating and the patient was happy to continue with this dressing following the four week assessment period.



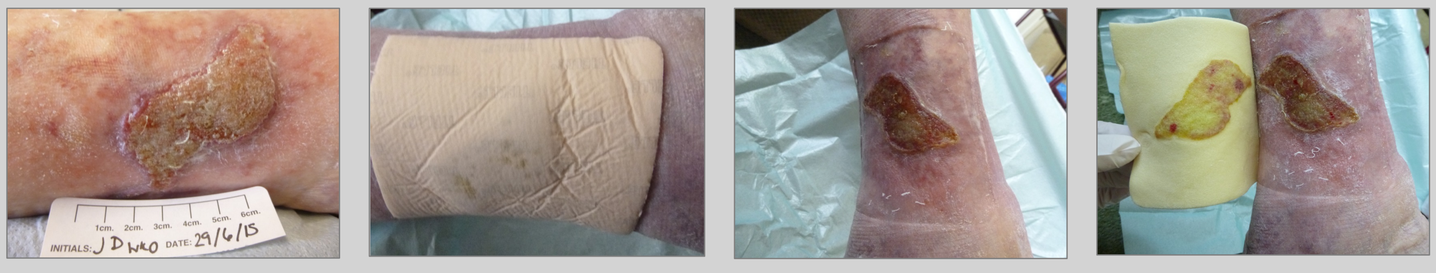
Results & Discussion: Ten patients with wounds of various aetiologies were recruited according to the criteria. There was a serial decease in wound size over the four week evaluation period. Two patients achieved complete re-epithelialisation between baseline and endpoint. A significant reduction in over-granulation was observed in all cases. Furthermore the dressing demonstrated good conformability on a range of anatomical sites which are often considered challenging to dress with other non-adhesive products. Dressing absorption was retained over a seven day period in low exuding wounds and wounds with moderate exudate levels often required dressing changes every three days. This suggests that the dressing may be suitable for treatment of venous leg ulceration in conjunction with compression bandage systems given that no episodes of wound related infections were experienced and patients did not report any increase in pain over the case series evaluation period.

Conclusion: The preliminary findings from this case series evaluation suggest that wound healing potential may be accelerated with the use of this non-adhesive hydro-polymer foam dressing with LiquaLock® Advanced Absorption Technology. The dressing was conformable and retained low to moderate exudate levels over a maximum of seven days which suggests a substantial economic gain in reducing the frequency of redressing visits. One interesting finding was the significant reduction in over-granulation tissue that was observed in all cases. The reason for this is unclear but it does provide preliminary evidence for further research.

* Tielle non-adhesive® Systagenix Wound management

Overall Summary of Findings:

Absoprtion of exudate good
Dressing comfortable under compression
Conformabitiy of dressing to wound and surrounding skin good
Ability to maintain contact with wound bed good
Ability to hold exudate away from surrounding skin good



Contact Details: +44 1443 443870 www.wwic.wales
Name Surname nicky.ivins@wwic.wales