

Evaluation Of ActivHeal Aquafiber® In A Complex Foot Ulcer Clinic In Podiatry

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Background:

The successful management of a diabetic foot ulcer relies on the process of identification and treatment of underlying disease in particular, maintaining an adequate blood supply to the wound, preventing infection and providing good local wound care, and providing pressure relief by offloading the affected area of the foot¹. While dressing products alone will not heal these wounds, they can contribute to an optimal environment to encourage healing and prevent complications, which can lead to deterioration². There is no 'ideal dressing for diabetic foot ulcers' and effective treatment of a diabetic foot ulceration is complex, and effective management of the wound bed and peri wound skin is important. Alginates dressing have been in wound management for over 30 years³ and ActivHeal Aquafiber® is a conformable, non woven, gelling alginate fibre dressing with a reinforced layer hidden within the mannuronic fibres.

Method:

ActivHeal Aquafiber® was evaluated on 10 patients by the Podiatry Service. All patients had chronic foot ulceration and were attending the Complex Wound Clinic. Prior to recruitment, they all received a full assessment of the vascular and neuropathic status and wounds were classified using both the TEXAS and SINBAD scales.

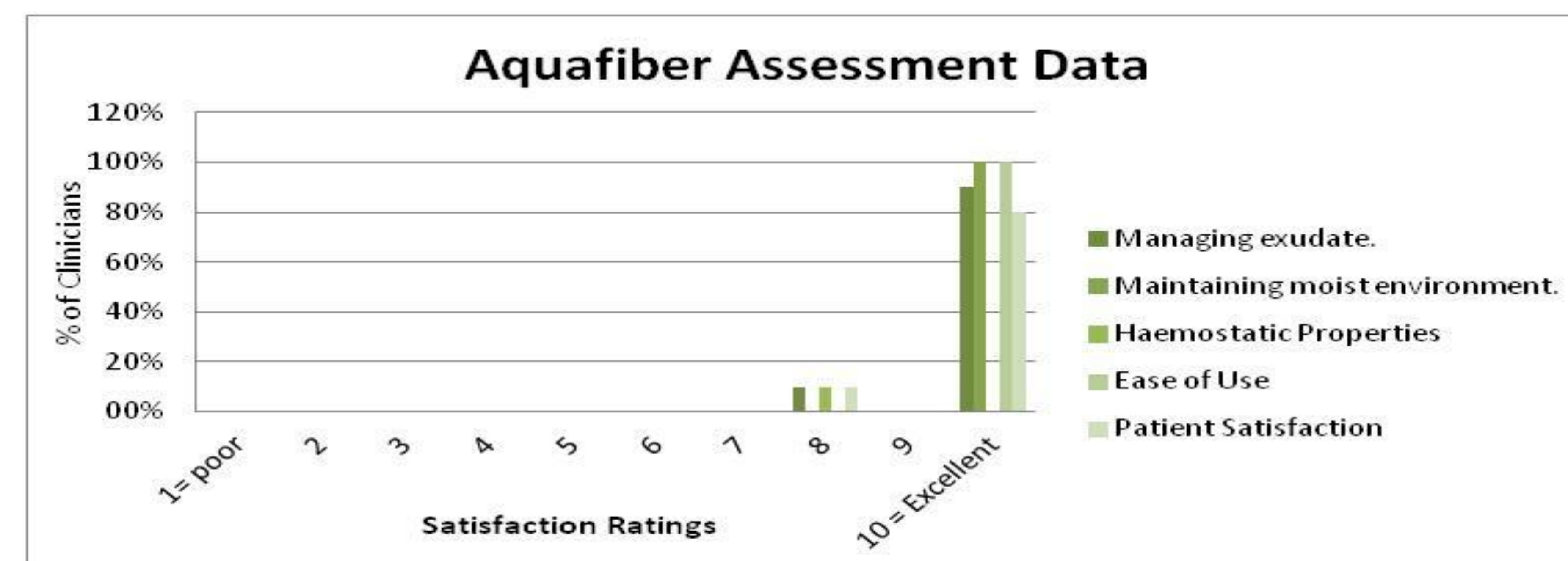
ActivHeal Aquafiber® was used as a primary dressing, on wounds assessed as suitable for a fibre product for a maximum of 4 weeks. All other care was delivered as planned. Wound debridement and off loading of the foot was undertaken where required.

Results:

10 patients with ages ranging from 54-89 were recruited. They all had either neuropathic or neuro ischaemic wounds on the foot, which required routine sharp debridement, offloading and management of wound exudate to facilitate wound progression.

ActivHeal Aquafiber® managed the exudate well and maintained a moist wound environment. When used with a secondary dressing, It absorbed exudate sufficiently without being too bulky to cause additional trauma to the foot. (See Table 1)

Table 1



The effectiveness of the dressing can also be observed by following the wound progression in two patients, demonstrating the wound bed status using photographs.

Patient 1

64 year old male.
Diabetic, chronic obstructive airways disease,
Neuropathic ulceration on the 5th metatarso-pharangeal joint.
Texas score B1. Patient receiving systemic antibiotic therapy.
Wound size assessment at start of evaluation 10mm x 5mm x 2 mm depth(also undermining medial lip 2mm).
100% granulation tissue in the wound bed, and the peri-wound skin was dry.
Exudate level was high



Wound prior to treatment with the evaluation dressing. 05/03/2015
The dressing was applied every 3 days after cleansing with an antiseptic solution, and the wound was sharp debrided.20/03/2015.



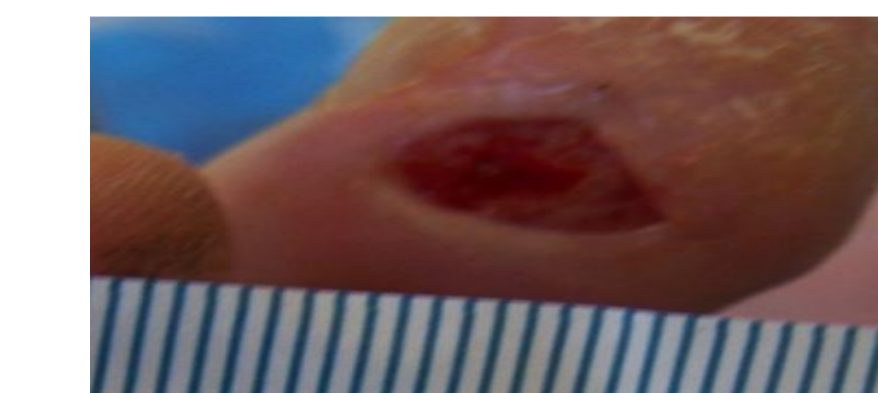
Wound size 8mm x 2mm x 1mm depth.
Minimal exudate.
Aquafiber® dressing no longer indicated.

Patient 2

57 year old male.
Type 2 diabetes
Neuropathic ulceration 1st toe lateral aspect of the inter-phalangeal joint
Texas score B1
Wound size assessment at start of evaluation 16 mm x18 mm probing x 2mm deep.
10% slough/90% granulation tissue in the wound bed.
Moderate wound exudate.



Wound prior to application of the Aquafiber dressing 26/03/ 2015
The dressing was applied on alternate days after cleansing with an antiseptic solution. The wound was also sharp debrided.



23/04/2015.
Wound size 8mm x 8mm x 1mm depth.
Minimal exudate.
Fibre dressing no longer indicated.

Discussion:

Fibre dressings are widely used in managing complex foot ulcers where effective exudate management is essential to facilitate the healing process and prevent peri wound skin damage. The gelling capability which occurs when they come into contact with wound exudate, provides a maintenance debridement function where there is superficial slough, is an advantage of these dressings. The performance of ActivHeal Aquafiber® demonstrated by the results and the case study were encouraging. The evaluation showed that the ActivHeal Aquafiber® is an effective wound care choice that has shown good management of exudate and created the right environment for healing and wound progression.

Conclusion:

ActivHeal Aquafiber® performed well in this small 10 patient evaluation. It was easy to use and supported the other interventions required to deliver best practice to patients with complex foot ulceration. All wounds progressed until the dressing was no longer required for the level of exudate. In both of the case studies illustrated that Aquafiber® conformed well, managed the exudate effectively and provided a moist wound environment. It was easy to apply and remove and was also used after sharp debridement to manage bleeding. The outcome of the study suggests that patients who have complex diabetic foot ulcers will have a positive experience when ActivHeal Aquafiber® is used.

References
1 International Best Practice (2013) Best Practice Guidelines : Wound Management in diabetic foot ulcers. Wounds International, London. Available at : <http://w3.internationalbestpractice.com/2013/10/15/>
2 Yorke M. & Spruce P (2015) An update on the use of Alginate dressings in the diabetic foot. The Diabetic Foot Journal. 18,(2) 96-100.
3 Clarke M. (2012) Technology Update: rediscovering alginate dressings. Wounds International 3. 24-8.