

A SERIES OF EVALUATIONS ASSESSING THE EFFICACY OF ACTIVHEAL AQUAFIBER® FOR USE ON CHRONIC AND SURGICAL WOUNDS IN THE PRIMARY CARE SETTING

AUTHOR: JOLENE PARKES, PRACTICE NURSE, ADDRESS: CHURCHSIDE MEDICAL CENTRE, WOOD STREET, MANSFIELD, NG18 1QB TELEPHONE: 01623 664877

Introduction

The skin is the largest organ in the body, weighing 2.7kg in the average adult, containing specialised cells and structures to maintain a protective barrier (Hampton, 2003).

With age the skin becomes thinner, with progressive normal and physiological aging changes increasing the risk for chronic health problems. This results in delayed wound healing (Boynton *et al.*, 1999). According to Winter (1962) the optimum healing environment is moist, and wounds are more likely to progress in a moist wound healing environment.

Wound bed preparation is a vital component of wound healing. Wounds will only heal if the optimum wound healing environment is provided (Hampton and Collins, 2005). Studies have examined the effect of alginate dressings on wound healing and they have demonstrated the ability of alginates to promote the stimulation of cytokines which are essential to the wound healing process (Thomas, 2000). This stimulation of cytokines is one of the key advantages of alginates. Alginate dressings also act as a haemostat and absorb exudate in the initial stages of application thus promoting healing via the progressive wound healing continuum (Brady *et al.*, 1980).

In the market place today there are a wide variety of alginates available to encourage wound healing. All of these dressings vary in relation to performance and evidence platform. This case study looks at the use of ActivHeal Aquafiber® with its new hidden reinforcing layer for use on surgical and chronic wounds in the primary care setting. It is the responsibility of clinicians to meet financial targets and achieve good healing outcomes.

ActivHeal Aquafiber® is a soft, conformable, highly absorbent dressing with a reinforcing layer hidden within the dressing construction, it is available in either a sheet or ribbon form. ActivHeal Aquafiber® is designed for use on moderate to highly exuding wounds and is haemostatic, aiding coagulation. In the primary care setting there are varying types of alginate dressings available on prescription which all discuss clinical benefits in accordance with the promotion of wound healing and differ in cost. The newly developed reinforced layer of the dressing provides improved wet integrity ensuring the clinician is confident that the dressing can be removed intact and is highly absorbent. This case study will discuss how ActivHeal Aquafiber® can deliver positive clinical and cost effective outcomes which will benefit both the patient and the NHS.

Method

In order for ActivHeal Aquafiber® to be evaluated, specialist wound management clinics were set up to assess and manage patients referred within the primary care setting. Four patients were treated with ActivHeal Aquafiber®, with a total of eight wounds, two of which were surgical wounds and six were chronic wounds. These patients were initially assessed to ascertain compatibility for the product and following this, had re assessments over a three week period.

The following assessment criteria was used to remark on wound progression or deterioration; wound healing state, treatment aims, reasons for clinical choice, exudate levels, dressing regime, wound dimensions, surrounding skin state, past medical history and previous dressings used, if applicable.

The following dressing performance indicators were completed at each reassessment and highlighted if the product in question provided results which were very satisfactory, satisfactory or not satisfactory on the following parameters: ability to manage exudate, conformability, maintaining a moist wound healing environment, ease of use, autolytic debridement, patient comfort and the overall rating of the product.

Results

The results obtained were collated and analysed. Four wounds healed within three weeks of ActivHeal Aquafiber® application, one wound partially healed within two weeks of ActivHeal Aquafiber® application, one wound improved within one week of ActivHeal Aquafiber® application and two wounds improved within three weeks of ActivHeal Aquafiber® application. Dressing performance indicators stated that the assessing clinician was very satisfied that ActivHeal Aquafiber® managed the wound effectively based on the measuring criteria (see figure 1).

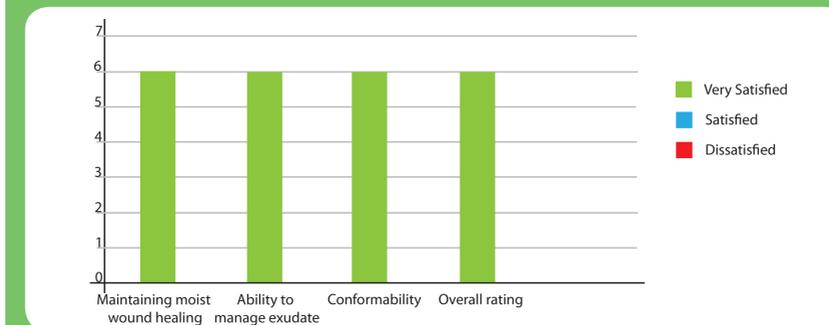


Figure 1: Graph demonstrating dressing performance indicators and assessing clinician's results following assessment.

The following photographs highlight the results achieved whilst using ActivHeal Aquafiber® over a three week period

Recurrent wound to buttock. Post surgery to wash out infected site December 2012. This patient initially presented with a recurrent swelling to her buttock and following surgery was discharged for dressing changes from the practice nurse.



Photo 1

5th July 2013 - Treatment aims initially were to promote granulation tissue growth and provide absorption for exudate. The wound bed tissue type was 100% granulation with moderate exudate levels. ActivHeal Aquafiber® was applied to absorb exudate, promote cell reproduction at the wound bed and reduce maceration to surrounding tissue.



Photo 2

8th July 2013 - At this stage the wound dimensions had decreased, there was less exudate and granulation tissue was present at the wound bed. The patient was happy with the wound progress and found the dressing comfortable to wear. The peri wound area was healthy and intact.



Photo 3

22nd July 2013 - The wound had reduced in size again. Dressing changes were now only once weekly and there was less exudate. The patient was happy with the wound progress.

Diabetic amputation toe November 2011, failed to heal.

Patient had initial surgery to amputate 2nd and 3rd toes on the 9th of November 2011. The wound failed to heal and the patient had further surgery on the 12th of June 2013.



Photo 1

5th July 2012 - The patient attended the practice nurse for assessment on the 5th of July 2013. Levels of exudate were high and the surrounding tissue was macerated. Treatment aims were to encourage moist wound healing and aid new cell formation at the wound bed, also management of exudate levels and minimise maceration to surrounding tissue. Upon wound assessment the surrounding tissue was 80% sloughy and 20% granulating. ActivHeal Aquafiber® was applied together with a foam adhesive dressing for security.



Photo 2

23rd July 2013 - At this stage the wound had improved, reduced in size and exudate levels were minimal. Surrounding skin was intact. The patient was very happy with the wound progress. Dressings were discontinued.

Discussion

Wound healing progress is apparent in this evaluation and case studies demonstrating that ActivHeal Aquafiber® delivers positive clinical outcomes and provides a cost effective alternative to premium priced equivalent products in the market place. Positive clinical outcomes were achieved whilst managing varying wound types with ActivHeal Aquafiber®, some of the wounds had previously been managed using comparable products. This provokes questioning surrounding the variance of specialist dressings available in the market place and the proposition for standardising products for use in the health care setting. Exudate poses significant problems for clinicians. These case studies demonstrate that ActivHeal Aquafiber® has the capability to contain high levels of exudate, whilst also demonstrating conformability, ease of removal due to its gelling structure and reinforcing layer aiding one piece removal. Wound care is becoming increasingly prominent within the Governments health agenda, and it is vital that clinicians have access to evidence based wound care that can improve the quality of life for patients whilst also looking after the budgets of the NHS.

Conclusion

This poster demonstrates that ActivHeal Aquafiber® provides positive clinical outcomes for use on varying wound types within the primary care setting. Over half of the wounds assessed completely healed within the ten week assessment period, demonstrating that alginate based dressings provide adequate healing promotion in accordance with clinical assessment. ActivHeal Aquafiber® can effectively manage exudate, provide the optimal environment and show wound progression whilst achieving cost savings and being acceptable to the patient and clinician.

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