Clinical Study Finds AQUACEL® Ag+ Dressing Demonstrates Wound Closure Rates in Hard-to-Heal Wounds

Novel dressing helps wounds, including those compromised by suspected biofilm and/or infection, progress to healing

A Real-Life Clinical Evaluation of a Next-Generation Antimicrobial Dressing on Acute and Chronic Wounds

Michael Walker, Daniel Metcalf, David Parsons, Philip Bowler.
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Key Highlights:
- The study shows that the use of novel AQUACEL® Ag+ dressing was associated with progression of wounds towards healing, and may deliver associated cost savings as a result.
- The study, in which a single wound in each of 113 patients was observed over an average treatment period of 4.1 weeks, showed:
  - 95% of all wounds either improved or healed completely, with an average reduction in wound size of 73% across all wounds.
  - 63% of all wounds achieved at least a 75% reduction in wound size.
- Based on these results and using a recently published wound care costing method, investigators estimated an approximate 30% saving in the cost of primary dressings when AQUACEL® Ag+ dressing is used.

Methods:
- International (15 country), non-randomised study including 113 patients with at-risk or infected wounds.
- 74% had suspected biofilm; most wounds (64%) were either venous leg ulcers (52%) or diabetic foot ulcers (12%); plus the majority of wounds displayed clinical signs of infection.
- No strict inclusion or exclusion criteria; the study involved patients with a wide variety of slow-, non-healing or deteriorating chronic and acute wounds.
- Baseline and final assessment of wounds were recorded and compared to evaluate wound progress, volume of wound, condition of surrounding skin, tissues present in wound bed, and exudate level.

Results:

Figure 1: Clinical Signs of Infection
- Percentage (%)
  - 0 20 40 60 80 100
  - No. of Wounds
  - Suspected Biofilm
  - 3 signs + Suspected Biofilm
  - 4 signs +Suspected Biofilm
  - 5 signs +Suspected Biofilm

Figure 2: Mean Time to Healing
- Wound type
  - VLU = venous leg ulcer; DFU = diabetic foot ulcer; SSI = surgical site infection; PU = pressure ulcer

Figure 3: Average Reduction in Wound Volume
- VLU = venous leg ulcer; DFU = diabetic foot ulcer; SSI = surgical site infection; PU = pressure ulcer

- At baseline, the wounds of 26 patients (23%) were improving, 65 (58%) were stagnant, and 22 (19%) were deteriorating. The wounds were assessed for clinical signs of infection (pain, redness, exudate, swelling, odour) as well as either confirmed or suspected biofilm. The breakout of percentage of wounds with number of displayed clinical signs of infection is shown in Figure 1.
- The mean time to healing with AQUACEL® Ag+ dressing across wound types is shown in Figure 2.
- Marked reductions in wound size were observed at the end of the treatment period. The average reduction in wound volume by duration from evaluation baseline to endpoint is summarised in Figure 3. The average treatment period for this evaluation was 4.1 weeks (+/- 1.7 weeks) when the majority of wounds had either healed or improved (n=107; 94.7%).
- Reduction in necrosis and slough, increase in granulation and epithelial tissue, reduction in exudate level, and improvements in periwound skin condition were noted.

References:

* Dressing did not contain strengthening yarn nor have the additional absorptive capacity of AQUACEL® Ag+ Extra™ Dressings.
** Of 121 patients recruited, 8 had incomplete data.