

An Evaluation of Kerramax®

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Introduction

KerraMax® (Crawford Healthcare) is advertised as a superabsorbent dressing which contains Absorbeze®, a new generation of superabsorbent polymers (SAP). It locks away wound exudate when the Absorbeze® chemically reacts with the water. Due to its unique mode of action, the manufacturers claim there are fewer leaks under pressure compared to traditional absorbent dressings which simply soak up liquid. The aim of the evaluation was to assess whether this superabsorbent dressing meets the manufacturer's claim and that it is an acceptable alternative for patients and healthcare professionals to commonly use on high exuding wounds.

Method

Healthcare professionals were invited by the manufacturer to complete an evaluation of their experience of the superabsorbent dressing, with one evaluation form being completed per patient/wound treated. Forms were returned by post to the authors where the data was collated and reviewed. The evaluation form was designed to allow healthcare professionals to fill it in within 10 minutes to ensure a high response rate. It consisted of 14 short questions (Table 1).

Table 1. Kerramax® evaluation form

1. How long was the patient treated with Kerramax®? (duration)
2. Treatment regimen(s) used.
3. Please indicate aetiology of ulcer/chronic wound.
Questions 4-8: Please circle the number between 0 and 10 that most closely reflects your opinion of Kerramax®.
4. Exudate control: How would you rate Kerramax® in terms of managing the exudates from the ulcer compared to previous dressing choices? (0 – did not meet my expectations 10 – met my expectations)
5. Ease of Kerramax® application: Please rate how easy Kerramax® was to apply? (0 – very difficult 10 – very easy)
6. Patient acceptability of Kerramax®: Please ask the patient how they rate Kerramax® in terms of comfort compared to their previous treatment? (0 – worse 10 – better)
7. Convenience: Over the last week, how convenient have you found Kerramax® for the management of the ulcer (e.g. time spent dressing the wound, visits to the clinic, etc)? (0 – very inconvenient 10 – very convenient)
8. Please compare Kerramax® with previous dressings (in terms of exudate control, absorption, etc). (0 – did not meet my expectations 10 – met my expectations)
9. Please describe any changes in the wound's appearance over the course of treatment.
10. Overall how does Kerramax® meet your expectations for your dressing requirements? (Meets – Exceeds – Does not meet)
11. On average, how long did it take you to change Kerramax® (minutes)?
12. What dressing would you have used on this patient if you had not tried Kerramax®?
13. Would you be happy to continue using Kerramax®? If 'YES' please specify what in particular you like about Kerramax®. If 'NO' please specify why not.
14. Any comments/suggestions?

Results

53 evaluations were returned, all of which have been included in the analysis. Average treatment with the product was 2 weeks (range: 2 days to 4 months), with frequency of dressing change typically being daily initially and then less frequent as the wound progressed. A wide range of wounds were managed with the dressing, of which ulcers were the most common (Table 2a and 2b). The average time to change the dressing was 5-10 minutes.

Table 2a. Aetiology of the wound

Aetiology of wound	Number of patients
Abdominal wound	2
Chronic cellulitis	1
Chronic renal failure	1
Chronic wound	1
Diabetic foot	3
Fracture blister	1
Fungating toes	1
Lymphoedema	2
Lymphorrea	1
Oedematous legs	3
Sacral	1
Stump wound	1
Surgical	2
Ulcer	28

Table 2b. Aetiology of the ulcer

Aetiology of ulcer	Number of patients
Arterial ulcer	4
Mixed aetiology	6
Neuropathic	1
Pressure	1
Venous	9
Not recorded	7

The superabsorbent dressing was rated highly for exudate control (Figure 1), ease of dressing application (Figure 2), patient acceptability (Figure 3), convenience (Figure 4) and when compared to previous dressings (Figure 5). In each of these categories, the average ratings fell between 8 and 10, with 10 being the highest rating.

Figure 1. Exudate control

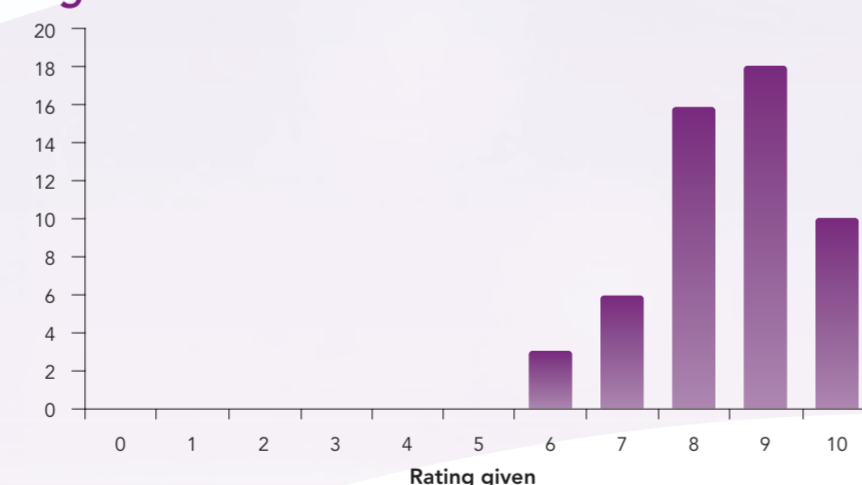


Figure 2. Ease of dressing application

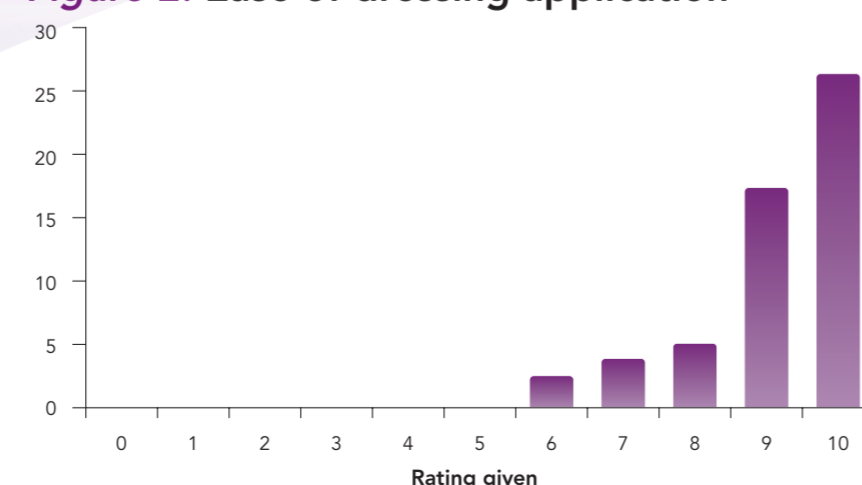


Figure 3. Patient acceptability

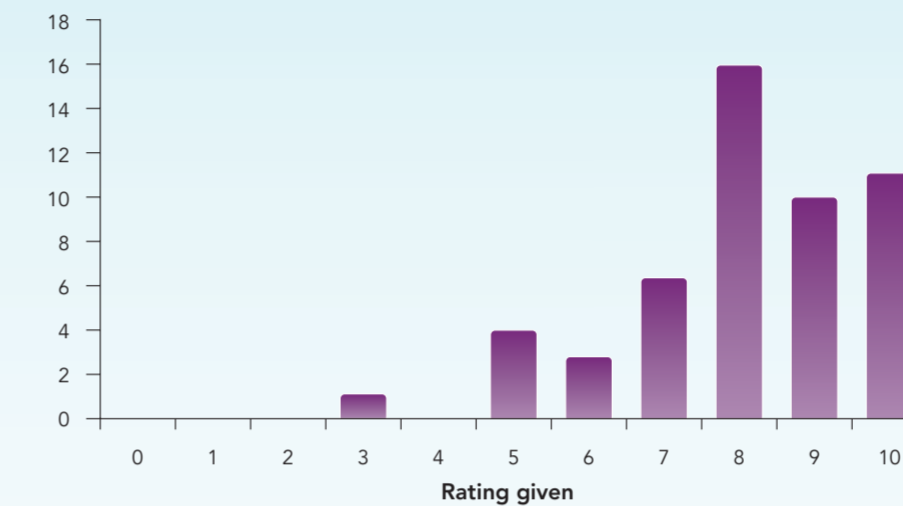


Figure 4. Convenience

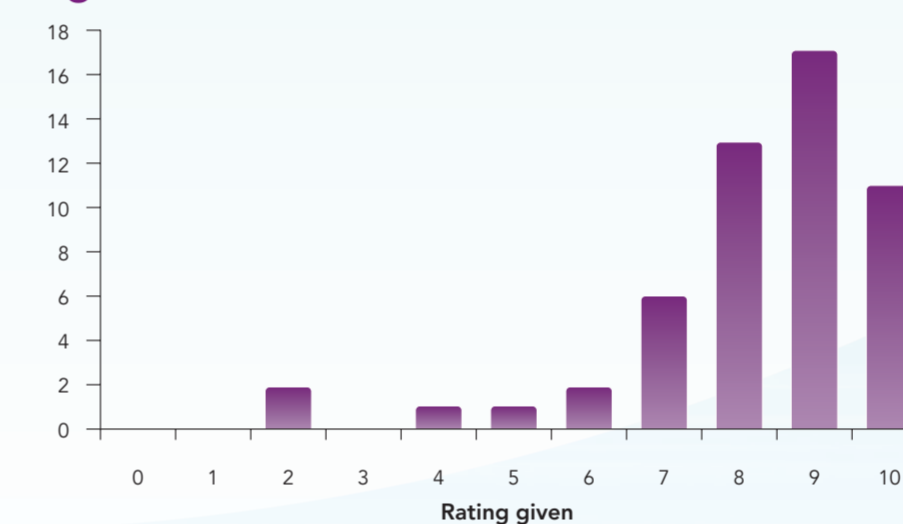
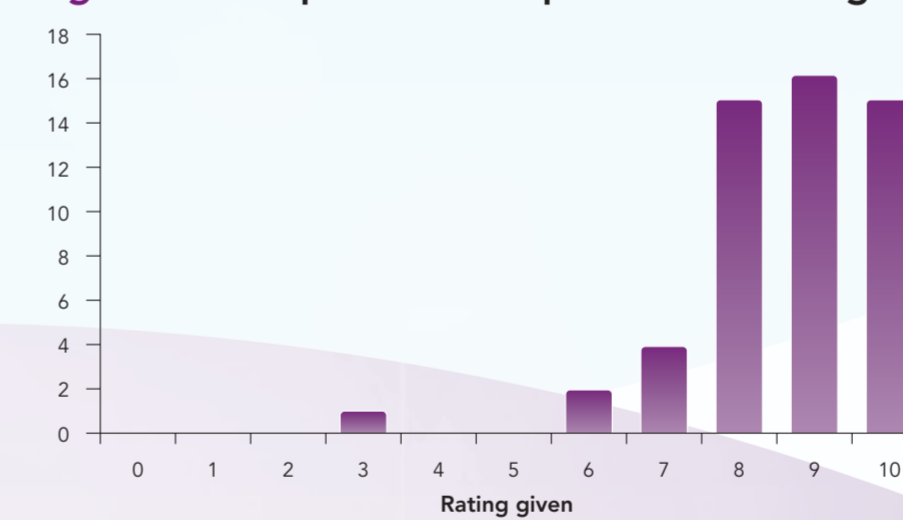


Figure 5. Comparison with previous dressings

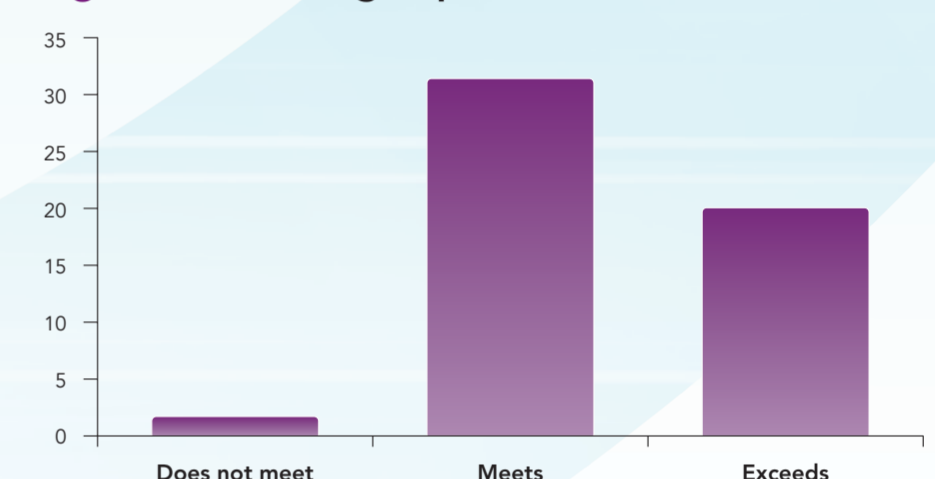


The most common observations cited were wounds appearing less macerated and exudate level managed. In general all observations were positive (Table 3). Over 30 respondents felt that the superabsorbent dressing met their expectations and 20 felt that it exceeded them (Figure 6). If the superabsorbent dressing had not been used, the most common alternative would have been another superabsorbent dressing. The majority of healthcare professionals (48 out of 53) would be happy to continue using the superabsorbent dressing. Reasons cited included, high absorbency, ease of application, flexibility, cost, comfort, reduced dressing change frequency, less maceration and the dry dressing is not bulky. A total of two responders felt that the superabsorbent dressing did not meet their expectations and neither of them would have been happy to continue using the superabsorbent dressing, whilst three did not reply.

Table 3. Wound healing/clinical efficacy

Description of wound over course of treatment	Total (n=33)
Less macerated	16
Exudate managed	10
Drier	5
Excoriation reduced	3
Granulating	2
Healed	2
Improved skin condition	2
Improved	1
Less slough	1

Figure 6. Dressing expectations



Discussion

This evaluation demonstrates the acceptability of the superabsorbent dressing in the management of exudate in chronic wounds. Healthcare professionals found the superabsorbent dressing managed exudate, was easy to apply, convenient and compared favourably to previous dressings. Patient acceptability was generally high. The superabsorbency property of the superabsorbent dressing results in reduced dressing changes ensuring disturbance to the wound bed is minimised. Further, by locking away the exudate from the wound and surrounding skin, the superabsorbent polymers can help prevent maceration. Patients stated that pain at dressing change is minimised, which is likely to be because the soft moist gel does not adhere to the wound site, thus reducing trauma and pain during both wear and dressing change. The superabsorbent dressing is suitable for use under compression as the fluid remains locked away, even under moderate compression, although maximum absorbency capacity will be reduced.

Conclusions

The superabsorbent dressing has been shown to be an acceptable dressing for use in a wide range of chronic wounds. It, therefore, is an ideal dressing to be used in primary care to manage excess wound fluid as it performs well under mild to moderate compression and can be used as a dressing to absorb wound fluid from other parts of the body where optimum absorption is required. The widespread availability of the superabsorbent dressing affords healthcare professionals a real solution to managing exudates, a clinically challenging and costly problem.