Use of an ionic hydrogel dressing on fungating wounds: Two case studies

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Introduction
The challenge posed to palliative care is not necessarily to heal wounds, but to improve the patient’s quality of life by managing the pain and malodour. In these case studies, the practitioner describes how she used a new ionic sheet hydrogel (ActiFormCool®) to successfully manage the symptoms associated with radiotherapy and fungating wounds.

ActiFormCool® is a new ionic sheet hydrogel designed to cool and soothe, providing non-pharmacological pain relief, whilst still addressing the issues of wound management. The ability to adjust the moisture balance makes this dressing ideal for managing exudate, debride necrotic and sloughy tissue, and encourage granulation.

Challenges
Approximately 5 – 10% of patients with metastatic cancer develop a fungating wound (Dowsett 2002). Not only is it often difficult to manage the physical aspects of the wound (pain, bleeding, exudates and malodour), but the psychological impact on the patient and family and carers is also often considerable (Wilson 2003). An additional problem is damage to the skin caused by radiotherapy with 90% of patients undergoing radiotherapy suffering some degree of skin side effects ranging from erythema to moist desquamation (de Haese 2005).

Case study 1
Anne was a 48 year old lady who had had a left mastectomy, followed by radiation. 18 months she developed a cancerous nodule on the medial side of her neck, but due to her deplited state, the oncologist decided against further surgery, opting instead for radiation. This resulted in extensive skin damage, causing the previous mastectomy wound to break down. The first wound was necrotic with full thickness skin damage and a dirty, exposed clavicle. The second wound (17cm) which contained large areas of slough and necrosis extended from below the shoulder joint and down the inner arm causing muscle wasting. The third wound measuring 8.7cm circumference behind the left shoulder blade also contained sloughy tissue with some granulation. All three were causing pain and were oozing intensely malodorous, copious, green, purulent exudate. She was unable to leave the house due to the pain, strong malodour and the effects of morphine.

Treatment
Previous treatments included hyperbaric oxygen therapy and several types of dressings including standard hydrogels, hydrocellular foam and film dressings.

The application of ActiFormCool® to the area provided immediate and on-going pain relief, absorbing the exudate with no leakage, which meant that for the first time her dressings were changed every 48 hours. A hydrocellular foam dressing and a crepe bandage were used as an absorbing the exudate with no leakage, which meant that for the first time her dressings were changed every 48 hours. A hydrocellular foam dressing and a crepe bandage were used as a secondary coverage.

Outcome using ActiFormCool®
Within 2 weeks the necrotic tissue and slough became softer, and mechanical debriement was possible and 70% of necrotic tissue was removed in the next 2 weeks. 3-4 weeks later the malodour reduced dramatically and Anne’s family and friends were able to visit. Sadly she died a few weeks later, but her last weeks were more comfortable.

Case study 2
Sarah was 42 years old when she was diagnosed with ovarian cancer, for which she had a total abdominal hysterectomy, followed by chemotherapy and radiotherapy. 3 years later she developed wound sinus which leaked copiously, needing irrigation and later a thoracotomy to drain the ensuing empyema.

Treatment
The wound cavity had been filled with a foam dressing, covered with abdominal swabs and sealed with surgical tape. The dressing needed to be changed three to four times a day, resulting in very red, excoriated and sensitive skin. This caused her to become bed bound and due to the odour, her husband moved out of their room, thus adding to her distress.

The copious amounts of exudate and the state of her skin made this wound difficult to dress. Strips of the dressing around the wound provided pain relief from the exudate and malodour, allowing dressing changes to be performed every 48 hours, longer than any previous dressing regime.

Outcome using ActiFormCool®
The dressing completely absorbed the exudate and malodour, allowing dressing changes to be performed every 48 hours, longer than any previous dressing regime.

She was able to get up and go out in a wheelchair, her husband moved back into their room, and her life returned to some form of normality. She died two months later, but before then she was able to watch her grandson play cricket for his country.

Conclusion
In these two case studies, the outcome was not one of healing, but of managing the symptoms of a disease that was causing considerable distress during the last days of these women’s lives.

ActiFormCool® provided pain relief, exceptional fluid absorption and greater comfort, enabling them to resume many of their normal activities and enjoy a better quality of family life.

References

Dressing requirements

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<tr>
<th>Requirement</th>
<th>Rationale</th>
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<tr>
<td>Cooling over the area</td>
<td>Reduce soreness associated with radiation burns</td>
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<tr>
<td>Absorb fluid</td>
<td>Fungating wounds tend to produce copious exudates, so the dressing must be able to manage the fluid loss</td>
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<td>Remains in situ</td>
<td>Body image dictates that the dressing should be comfortable, stay in place and not be bulky under clothes</td>
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<td>Debride necrotic tissue</td>
<td>Although fungating wounds have a vasculature arising from the solid tumour, the vessels are prone to rupture, which leads to tissue death (Grocott 2007)</td>
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<td>Reduce pain</td>
<td>Careful selection of dressing scan often alleviate pain without the need for analgesia (Hampton 2003)</td>
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