The use of Actilite Protect® as an all-round wound care solution

Tracey Morgan

Community nurses often have very busy caseloads and need a wide variety of knowledge to deal with the many different clinical scenarios that they face. This is particularly true of wound care, which can present a unique set of challenges, including infection, how to control exudate and making sure that any dressing they have chosen does not actually further harm the patient by, for example, damaging the skin when it is removed. This article outlines some of the most important areas that community nurses need to understand when it comes to wound care before going on to look at the solutions provided by one particular dressing (Actilite Protect®; Advancis Medical), which is designed for use on the full range of wounds, including acute skin tears, post-surgical wounds, chronic leg ulcers, pressure ulcers, diabetic ulcers and infected wounds. As well as presenting an overview of the dressing, this article also presents a series of case studies that illustrate the benefits of the dressing in practice.

KEYWORDS:
- Wounds
- Honey
- Exudate
- Hydrophilic foam dressings

The specialty of wound care is one that has expanded exponentially in modern times with a plethora of theories and technologies, including wound bed preparation, the role of proteases, negative pressure wound therapy (NPWT), and an almost bewildering array of dressing formulations, rom antimicrobials to larval-based products.

Community nurses need to have a variety of skills as wound care can present a unique set of challenges, including infection, how to control exudate and making sure that any dressing they have chosen does not actually further harm the periwound and newly formed tissue by, for example, damaging the skin when it is removed. They also need to have a grasp on the many different types of wound presentations from acute wounds and surgical wounds through to chronic, non-healing wounds.

However, for the clinician ‘on the ground’ who may not have time to apprise themselves of all the theory — or indeed afford all of the new technologies — there is still a high premium placed on having a range of dressings that can be used on a variety of wounds; are simple to use; patient-friendly; and — increasingly important in this day and age — cost-effective (Chandan et al, 2009).

This article looks at some of the basic wound care knowledge that community nurses need to be familiar with, as well as examining one particular dressing (Actilite Protect®; Advancis Medical) and its role in providing a solution to many of the modern nurse’s wound care problems.

COMMON WOUND CARE PROBLEMS

Infection
The fact that a wound will become contaminated with organisms is inevitable and nurses need to remember that no wound is truly sterile and the majority will go on to heal (Butcher, 2013). Despite this, some wounds will become infected — this has a negative impact on healing and can result in sepsis unless steps are taken to control it (Butcher, 2013).

Signs that a wound is becoming infected include wound pain, erythema (redness of the skin), a feeling of ‘warmth’ on the wound bed and surrounding tissue, swelling, and unpleasant discharge (Cutting and Harding, 1994; Butcher, 2013). A diagnosis of wound infection is based on the presentation of clinical signs and symptoms.

Exudate
Wound exudate is a crucial component in a healing wound. Exudate prevents the wound bed from dehydrating, as well as providing much-needed nutrients that enable epithelial cells to migrate across the wound bed and necrotic tissue to be separated from healthy, growing tissue through a process known as autolysis (World Union of Wound Healing Societies [WUWHS], 2007; Beldon, 2014).

Exudate production is a completely natural element of wound healing, however an excess of exudate can become a negative. Too much nutrient-rich exudate means that the skin surrounding the wound may actually begin to break down (maceration). High volumes of wound fluid can also have a serious effect on a patient’s

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Actilite Protect®
The first time 3 dressings have been combined

Wound healing...

as nature intended

- Combination 3 in 1 dressing – foam, dry honey film and silicone
- Atraumatic soft silicone border allows conformability to body contours
- Designed to maintain a moist wound environment
- Clear backing allows easy assessment of wound exudate
- Appropriate for every stage of the healing process
- Wide range of sizes (cm) – 10x10, 10x15, 10x25 and 10x35
quality of life through soaked and bulky wound dressings; soiled clothes; malodour; and embarrassment (Beldon, 2014).

**PRODUCT CHOICE**

It is crucial that community nurses know about — and have access to — a variety of cost-effective wound dressings that they can use in any given clinical scenario. However, the pure amount of different products can be confusing. To this end, Advancis Medical offers a series of dressing options for the clinician to choose from depending on the patient’s needs, whether this be:

- A primary non-adherent foam dressing for use under compression (Advazorb®)
- A soft silicone wound contact layer that protects the periwound skin (Silflex®)
- A superabsorbent dressing that can be used to manage excess exudate production (Eclypse®).

The aim is for the breadth of this product range to meet clinical need and improve patient outcomes.

However, an area as diverse as wound care demands constant innovation and to further meet the needs of patients, Advancis Medical has created Actilite Protect®, a dressing that combines the silicone, foam and honey technology found across the company’s wound care range to create one unique dressing.

**ACTILITE PROTECT®**

Faced with a growing incidence of chronic and acute wounds, clinicians need practical solutions. Fortunately, among the advances borne out of our greater understanding of wounds are new dressing technologies designed to combat some of the conditions that lead to poor healing, as well as the symptoms that cause such distress for patients.

Actilite Protect is one such dressing. Comprising a hydrophilic foam dressing with a soft silicone wound contact layer and border, it also contains 100% medical grade Manuka honey and a Manuka oil dissolvable film.

Upon contact with exudate, this unique film forms a ‘gel’ able to donate medical grade Manuka honey directly where it is needed. This honey complex can work directly on the wound and periwound area, actively killing bacteria and preventing their regrowth. Additional exudate is further managed by the hydrophilic foam, providing effective absorption and patient comfort.

‘An area as diverse as wound care demands constant innovation to meet the needs of patients’

Actilite Protect is designed for use on the full range of wounds, including chronic leg ulcers, pressure ulcers, diabetic ulcers and infected wounds, as well as acute skin tears and post-surgical wounds (although it is not designed for use on highly exuding wounds).

**Honey**

Medical grade Manuka honey (a specifically manufactured product that is sterilised to remove impurities or potential bacteria) has been shown to have many applications in wound care, particularly when used as part of a dressing’s composition. Honey has a gentle debriding effect on a wound, creating a moist wound environment that facilitates autolysis by drawing fluid from the wound through powerful osmotic action, while simultaneously rehydrating devitalised tissue (Gethin and Cowman, 2008; Evans and Mahoney, 2013).

Manuka honey’s broad spectrum of action against bacteria has been widely reported (Molan, 2005), and it also acts against the chronic inflammation that can impede healing, while simultaneously promoting angiogenesis (Bainbridge, 2013).

As one of the first companies in the UK to introduce medical grade Manuka honey into wound care dressings, Advancis Medical have developed a wealth of expertise and knowledge in producing innovative honey-based products.

**WOUND TYPES**

**Acute wounds**

Acute wounds present a particular management problem as prompt action is needed and a poor choice of dressing at the outset of a wound care treatment pathway can have serious ramifications further along (Nicks et al, 2010). One of the most common forms of acute wounds are skin tears, which are caused by friction, shear or blunt trauma causing the skin’s composite layers to separate (All Wales Tissue Viability Forum, 2011; Stephen-Haynes and Greenwood, 2014). A skin tear can be partial- or full-thickness, and the priority of treatment is repositioning the skin flap and application of an appropriate dressing, which will help to reduce immediate infection risk, close the wound and protect the periwound skin.

Atraumatic contact layers or all-in-one dressings have been recommended for skin tears, particularly those that do not adhere to the wound but rather to the skin flap and surrounding skin — this allows the flap to stay in place (All Wales Tissue Viability Forum, 2011). Actilite Protect’s soft silicone wound contact layer is specifically designed to protect the wound itself (particularly at dressing change where its non-adherent qualities mean it reduces trauma), while simultaneously promoting healing and allowing the passage of exudate.

**Surgical wounds**

Surgical wounds are often classed as an acute wound and involve a break in the protective barrier of the skin — this increases the risk of bacterial contamination, which is a particular consideration in these wounds as postoperative wound infection not only has high morbidity, but also incurs further costs (Milne et al, 2014). Surgical wounds require careful management and the dressing chosen needs to maintain the moist wound environment required for healing (Milne et al, 2014), as well as protecting the wound itself.

Actilite Protect’s ability to form a gel-like substance while absorbing exudate is crucial in providing the...
CASE 1

This case report shows how the use of a honey and foam dressing on a pressure ulcer that had remained unhealed for six months resulted in full healing after two weeks of treatment.

This patient was an 82-year-old woman who was being cared for in a nursing home. She had a pressure ulcer on the side of her left foot that had been present for six months. She had been having her ulcer dressed with Sorbsan® (Aspen Medical) every two days with a foam dressing as a secondary dressing and a protective barrier applied to the periwound skin.

The patient was a non-smoker. Her nutritional status was described as poor, and, although she did not have diabetes, she was being checked every three months because of the very slow healing rate of her chronic wound.

It was decided to use Actilite Protect on the patient’s wound because of the beneficial components, including Manuka honey that would aid antimicrobial debridement, a foam layer for exudate management and a silicone outer layer to protect the fragile periwound skin and assist with atraumatic removal.

Sorbaderm® (Aspen Medical) barrier film was used along with Actilite Protect 10x10cm, although the clinician commented that she would have used a 5x5cm dressing had this size been available.

WOUND PROGRESS

On presentation, the wound consisted of 100% granulating tissue with dimensions of 1x1.5cm and it was described as critically colonised. The periwound skin was red but the wound was not causing pain. After one week of treatment the tissue was still 100% granulating but the wound size had reduced to 1x1cm.

After using the new regimen for two weeks the clinician rated the product as very easy to use, apply and remove (rating all three categories as ‘1’ on a five-point scale where ‘1’ was very easy and ‘5’ was very difficult). The dressing was rated as ‘atraumatic’ to the wound bed and the periwound skin.

Dressing changes were pain-free and there was no need for local analgesia. The dressing remained intact upon removal and stayed in place during wear. Its conformability was considered very good. The edges of dressing had rolled and the clinician stated that the use of oval-shaped dressings on that particular part of the foot could be used to prevent this.

When asked about the new dressing, the patient reported that it had been very comfortable and she was very satisfied with the treatment (rating it ‘1’ on a scale where ‘1’ was ‘very satisfied’ and ‘5’ was ‘dissatisfied’). She also reported that the treatment had been pain-free.

The dressing was now being changed every five days rather than every two days, and after two weeks of treatment the wound had completely healed. The clinician stated that the infection that had been preventing the wound from healing had been resolved through Actilite’s Manuka honey dissolvable film.

The Actilite Protect dressing healed the wound, whereas the previous regimen that had used two dressings had failed and the clinician stated that Actilite Protect positively contributed to the wound’s healing.
CASE 2

This case report shows how the use of a honey and foam dressing on a skin tear resulted in the wound healing during the two-week change of regimen.

This patient was a 74-year-old woman who was being cared for in a nursing home. She had an unhealed skin tear on her lower shin caused by a trauma to the leg that had occurred four weeks previously. Before the evaluation it had been treated with a foam dressing that was changed every two days.

The patient had a poor nutritional status but no underlying medical conditions and she was a non-smoker. There was no use of antibiotics either before or during the evaluation.

During the evaluation a 10x10cm Actilite Protect dressing was used, as the foam can absorb mild-to-moderate exudate and the Manuka honey is a natural antimicrobial, which can help with debridement — both qualities that the clinician thought might help with this particular wound. The dressing also has an atraumatic silicone wound contact layer designed for pain-free removal.

WOUND PROGRESS

After two weeks of treatment the clinician rated the product as ‘3’ on a scale of 1–5 for ease of use, where ‘1’ was ‘very easy’ and ‘5’ was ‘very difficult’ — the dressing was also found to be easy to apply and remove (both rated ‘2’ on the five-point scale). The dressing was deemed to be atraumatic to the wound bed and the periwound skin (rated ‘4’ where a score of ‘5’ was considered ‘atraumatic’), and it was reported to have conformed well to the wound. The dressing remained intact upon removal and stayed in place as long as had been expected, without the edges rolling.

During the two-week evaluation there had been no pain on application or removal and there was no need for analgesia during dressing changes. In fact, no pain was reported throughout the entire evaluation. When the patient was asked about the new dressing regimen, she rated it as very comfortable and was satisfied with the dressing’s performance (rating it ‘2’ on a five-point scale where ‘1’ was ‘very satisfied’).

By the end of one week of treatment the wound bed consisted of 50% granulation tissue and by the end of two weeks this had risen to 100%. The wound, which measured 10x5cm upon presentation and was reported to have critical colonisation, healed after being dressed with Actilite Protect every three days. The periwound skin did develop signs of maceration during the trial and the clinician commented that it would be necessary to use barrier protection on the periwound area.

The clinician was unable to say whether the Manuka honey in the dressing had treated any infection, although she did state that the product had positively contributed to the wound’s healing. She was particularly impressed by the fact that Actilite Protect is a single dressing that does not require a secondary dressing and felt that this made it easier to apply.

The clinician did express some concerns about the shape of the dressing and suggested that an oval shape would prevent any rolling of the edges when using it on differently positioned wounds (such as on the buttocks).

Cases courtesy of Jackie Stephen-Haynes, professor and consultant nurse in tissue viability, Birmingham City University and Worcester Health and Care Trust; Rosie Callaghan, tissue viability nurse specialist, Worcester Health and Care Trust
moist wound-healing environment necessary for managing surgical wounds, while the Manuka honey/oil combination used in the manufacture of Actilite Protect begins to act immediately against the development of surgical site infection (SSI) with harmful bacteria, such as meticillin-resistant *Staphylococcus aureus* (MRSA), vancomycin-resistant *Enterococcus* (VRE) or *Providentia stuartii*.

**Chronic wounds**

With up to 200,000 new chronic wounds annually in the UK alone, the treatment of chronic, non-healing wounds is a major drain on resources in modern health care (Posnett and Franks, 2008; Chandan et al, 2009), as well as having a serious impact on the suffering of patients. With ever-increasing levels of obesity, diabetes and other long-term conditions, chronic wounds such as pressure ulcers, leg ulcers and diabetic foot ulcers show no sign of abating, instead presenting an ongoing challenge to the skills and knowledge of healthcare professionals (Posnett and Franks, 2008; Chin et al, 2013). Chronic wounds can present the clinician with a unique set of problems, including detrimental volumes of exudate production (Bianchi, 2012), infection, pain and odour (International Consensus, 2011; Chin et al, 2013), all of which pose a serious management challenge.

Actilite Protect’s broad mode of action makes it particularly useful in the treatment of chronic wounds — its gelling action promotes the moist wound environment so crucial to the ability of epithelial cells to migrate freely across the wound’s surface, as well as providing the ideal conditions for angiogenesis (Bryan, 2004). Similarly, the antibacterial action of the Manuka honey in Actilite Protect helps to stave off the development of infection that so often impedes healing in chronic wounds.

**CONCLUSION**

Not only is it crucial that community nurses have a basic grasp of wound complications such as infection and excess exudate production, they also need a working knowledge of the types of products that will move a wound along the healing trajectory.

Actilite Protect comprises a hydrophilic foam dressing with a soft silicone wound contact layer and border — it also contains medical grade Manuka honey and a Manuka oil dissolvable film. The profile of Actilite Protect makes it ideal for use in a number of wound scenarios, including chronic, acute, and surgical wounds, while its honey content means that it can also be used to combat infection.

The snapshot of case studies in this article demonstrates that Actilite Protect has a practical application across a range of wounds and as such would be a welcome addition to any community nurse’s wound care armoury.

**REFERENCES**


