



Case report series of Actilite Protect®: a 10-patient clinical evaluation

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

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, from antimicrobials to larval-based products. 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 wound care 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).

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®); or a superabsorbent dressing that can be used to manage excess exudate production (Eclipse®). 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 as well as theories. 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® (Advancis Medical) is one such dressing. Comprising 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.

Upon contact with exudate, the film forms a 'gel-like' substance absorbing exudate while maintaining the moist wound healing environment crucial to wound healing. Simultaneously, the honey/oil contained within the dressing directly penetrates the wound, working to combat the action of harmful bacteria. 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.

Honey

Medical grade 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). Honey's broad spectrum of action against bacteria has been widely reported (Molan, 2005), and it also acts against the over-inflammation that can impede healing, while simultaneously promoting angiogenesis (Bainbridge, 2013). Being the first company 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 Nurses' 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 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

The treatment of chronic, non-healing wounds is a major drain on resources in modern health care (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 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.

CASE REPORTS

This introductory document will be followed by a case report series exploring the use of Actilite Protect over a predetermined time period in a range of wounds. The aim of these evaluations is to provide an overview of Actilite Protect's action on non-healing wounds, and to ascertain whether the dressing would prove a worthy addition to the healthcare professional's wound care toolkit, from a clinical, quality of life and health economic perspective.

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