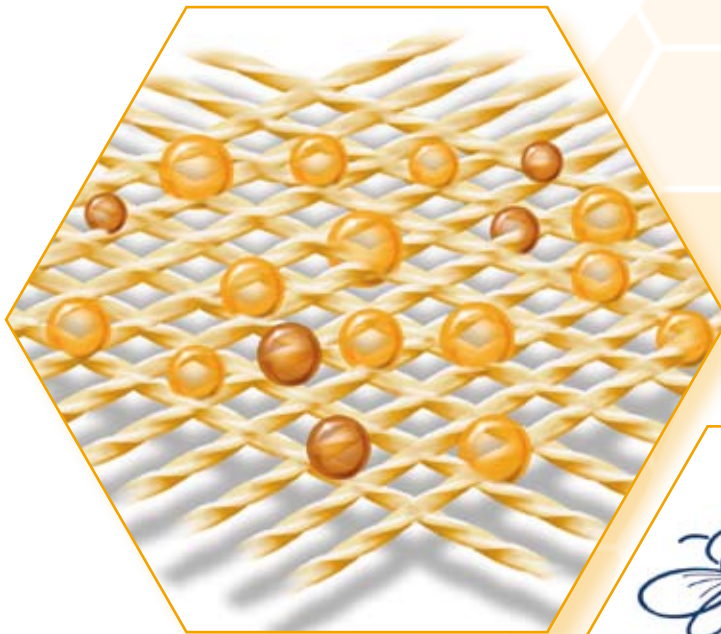


An evaluation of Actilite

Antibacterial non-adherent dressing with Activon+



Antibacterial protection

Activon honey plus Manuka oil.

Non-adherent

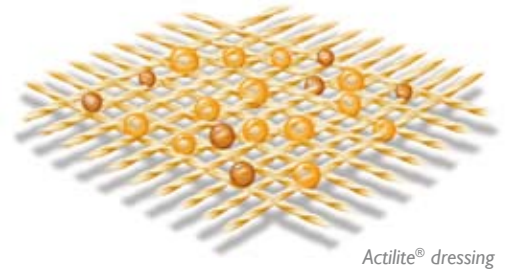
The non-adherence of the knitted viscose is further enhanced by the Manuka oil.

Allows passage of exudate

Open structure to allow exudate to pass to secondary dressing whilst Actilite protects the wound bed.

Introduction

Over the past few years the tradition of applying honey to wounds has found fresh evidence to support its role in assisting the healing process in acute and chronic wounds. Work by Professor Peter Molan at the University of Waikato, New Zealand has supported the action of honey as a natural wound treatment and has highlighted the superior antimicrobial action of Manuka Honey that can be verified by the presence of the Unique Manuka Factor or UMF.



Extensive clinical studies have been performed to show honey to be a viable method of wound treatment for a range of modern acute and chronic presentations. These include burns, venous leg ulcers, diabetic foot ulcers, arterial leg ulcers, pressure ulcers, graft site management, infected wounds and skin tears.

The properties that support honey in modern wound care range from aiding debridement, anti-inflammatory properties and a broad spectrum

antimicrobial potency in over 70 species of common wound pathogens - including MRSA. Honey is also able to deodorise wounds and stimulate healing due to its nutritive and oxygen releasing capabilities in the wound environment.

(Burlando, 1978; Bergman et al, 1983; Gupta et al, 1992; Kumar et al, 1993; Suguna et al, 1993; Postmes et al, 1997)

Actilite is a new Manuka based honey dressing from Advancis Medical Ltd that reflects the need to find practical ways to use Manuka UMF graded honey in

modern practice. The light, non adhesive, malleable mesh overcomes some of the resistance to using pure honey as it is non-sticky and is designed to allow the passage of exudate avoiding the potential maceration sometimes attributed to honey use. The combination of Manuka honey and Manuka oil means that the amount of honey required for wound treatment is significantly reduced enabling a gentler, thinner dressing to be utilised without compromising antimicrobial potency.

Conclusion

The cases outlined in this evaluation document cover experiences with wounds in secondary and primary care treated with Actilite. They include some challenging wounds such as long term lower limb ulceration, abdominal dehiscence, lymphoedema, diabetic foot ulcers with secondary complications, and venous leg ulcers some of which failed to improve via previous methods.

The use of Actilite demonstrated clear improvements in outcomes even in cases where treatment with other methods had failed. Having been easy to apply and to incorporate into standard management protocols (eg. where compression was required) the dressing performed well with positive clinical outcomes.

Actilite was well tolerated by patients. Quality of life improved considerably due to reduction in exudate levels, management of symptoms of bacterial and fungal infection, reduction in inflammation and greater concordance with compression therapy due to reduced pain on application.

The evaluation of Actilite in the clinical setting has demonstrated a valuable and versatile antimicrobial dressing that harnesses the benefits of UMF graded Manuka honey in a low profile, non sticky, user friendly format.

Acknowledgements

Georgie Hollis - Intelligent Wound Care

Leanne Cook, Vascular Nurse Specialist - Pinderfields General Hospital

Pam Kirby, Vascular Nurse Specialist - Kings Mill Hospital

Jivka Dimitrova, Tissue Viability Specialist Nurse - University Hospital of Leicester

Jayne Birchall, Tissue Viability Specialist Nurse - University Hospital of Leicester

The use of Actilite dressing and four layer bandages in the management of venous leg ulceration.

Leanne Cook - Vascular Nurse Specialist - Pinderfields General Hospital

Mrs. T is a 41 year old lady who was referred to the vascular clinic by her district nurse services due to non healing ulceration. She presented with an ulcer to her right medial malleolus which had been present for ten weeks.



In community she was being dressed with non adherent dressing and four layer bandage, with little signs of improvement. Mrs. T gave a history

of previous ulceration over the same area two years ago, which successfully healed within twelve weeks with four layer compression bandaging. Other past medical history to note included DVT for which she continued to take Warfarin. She complained of constant moderate pain from the peri-ulcer area. On examination all peripheral pulses were palpable and her ABPI = 1.1 with triphasic tones. The ulcer bed measured 5cm x 6cm with superficial slough at the base; there was also evidence of maceration. Her limb was slightly oedematous with no evidence of cellulitis. The aetiology of the ulcer was confirmed as venous. Actilite (Advancis Medical) was applied to the ulcer bed to provide a moist environment with the added benefit of providing antimicrobial protection, four layer compression was continued. Mrs. T was given lifestyle advice, she was also commenced on regular paracetamol with codeine phosphate for breakthrough and a venous duplex scan was requested.

Six Weeks

Six weeks later Mrs T returned to clinic the ulcer bed had substantially reduced in size to 2cm x 1.5cm with a healthy



granulating wound bed, the maceration had reduced and also had her pain, now only needed the paracetamol occasionally. Her venous duplex showed deep venous insufficiency but no superficial insufficiency.

Conclusion

Actilite dressing in combination with four layer bandage promotes healing and provides significant improvement in patients life with venous ulceration.

The use of Actilite on a venous leg ulcer

Pam Kirby - Vascular Nurse Specialist - Kings Mill Hospital

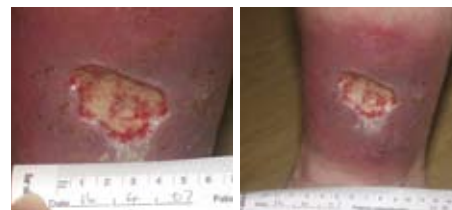
The patient (W.M) has been treated with various methods of compression bandages and hosiery in the past with poor results and was seen by the dermatologists who also failed to provide a solution. He was referred by dermatology to the vascular clinic for an opinion regarding the non-healing ulcer.



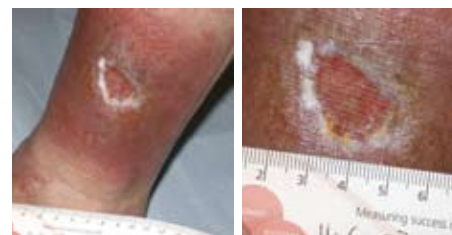
The patient was diagnosed with venous disease in origin with an Ankle Brachial Pressure Index of 1.06 and a duplex scan to demonstrate venous insufficiency. W.M. had previously been treated with compression but found it painful and was using a Class 1 compression stocking as this was the only thing he could tolerate over his dressings.

Actilite and a foam dressing were applied over the whole area, and the patient continued with the same stocking.

Four weeks into treatment and the ulcer size has reduced, slough was lifting, and surrounding skin almost healed. The pain had substantially reduced and W.M. was now able to tolerate class 2 hosiery.



Twelve weeks on and the cavity is now filled, and awaiting epithelial cover, there is no slough present and the wound has greatly reduced in size.



Obese female patient with bilateral lower leg lymphoedema and leg ulcers

Jivka Dimitrova - Tissue Viability Specialist Nurse - University Hospital of Leicester

A 58 year old lady transferred from another hospital with acute on chronic renal failure and respiratory failure. The patient was morbidly obese with a history of type 2 diabetes mellitus, hypertension, bilateral lower leg lymphoedema, leg ulcers, poor mobility and diabetic neuropathy.

Due to chronic skin changes and hyperkeratosis, papillomatosis, elephant skin with a warty appearance, patients with gross lymphoedema are prone to recurrent inflammatory episodes and



cellulitis. On first assessment, the patient presented with blistering to dorsal aspect of the left foot, due to cellulitis. One week treatment of Actilite, secondary padding and bandage commenced and was changed

every three days resulting in a rapid improvement of the condition of the skin. All blistered areas were fully epithelialised and cellulitis had subsided. She was then transferred to another hospital.



Elderly female patient with chronic venous leg ulceration

Jivka Dimitrova - Tissue Viability Specialist Nurse - University Hospital of Leicester

87 year old lady admitted to hospital with an extensive CVA. She had previous history of chronic venous ulceration of right lower leg which has been treated by her district nurses using different dressing regimes and three layer compression bandaging with little effect.



Upon initial assessment by tissue viability, the patient presented with a 3cm x 2cm full thickness skin ulcer to right medial gaiter area and two smaller ulcers, proximal to the first ulcer. All ulcers were

superficially sloughy but not infected, exuding high levels of serous fluid causing white maceration and irritation of surrounding skin. As the patient suffered with psoriasis, there were multiple psoriatic lesions and hyperkeratosis to both feet and gaiters.

Following a three week treatment with Actilite dressing to ulcerated areas and three layer compression bandaging (changed weekly) all ulcers were fully healed, skin texture improved considerably and some of the psoriatic plaques has disappeared. Patient was discharged to a Nursing home with weekly maintenance compression therapy and skin care. Due to general deterioration and development of a chest infection, the patient was readmitted to hospital two weeks after initial discharge. Her right leg had also deteriorated, she had new, small but red

inflamed ulcerations to her shin, and what appeared to be pustules to plantar the aspect of her foot. Again Actilite was applied to all new skin damage/irritations and three layer compression. Bandaging was reapplied to aid venous return. One week later all signs of skin



infection had disappeared and ulceration had healed. No further primary dressings were required but weekly skin care and maintenance compression were continued.

Female patient with an infected and dehisced abdominal laparotomy wound

Jivka Dimitrova - Tissue Viability Specialist Nurse - University Hospital of Leicester

A 71 year old lady referred to the tissue viability team for assessment and advice on management of infected and dehisced abdominal laparotomy wound. She had a history of rheumatoid arthritis (which was treated with steroids), right total knee replacement, hypothyroidism and anaemia.



Upon initial assessment the patient presented with two areas of dehiscence. Proximal area approximately 5cm



x 2cm x 0.5cm, covered with thick patches of devitalised, necrotic tissue which had an offensive odour. Distal area approximately 12cm x 7cm x 7cm, again 100% of the base of the wound covered with thick, soft, necrotic tissue. The distal end of the wound was treated with topical negative pressure therapy, whilst the proximal end, with low exudate levels, was treated with Actilite to provide antibacterial properties, encourage debridement and reduce



inflammation. The Actilite dressing was secured with a film dressing and changed every three days. One week later the proximal wound was approximately 90% clean and granulating, no evidence of infection (no systemic antibiotics were administered throughout the treatment), reduced local pain and no malodour. On next planned review, the proximal wound continued to show signs of improvement and was almost 100% clean and granulating.

Female patient with chronic lower leg lymphoedema and recurrent cellulitis

Jivka Dimitrova - Tissue Viability Specialist Nurse - University Hospital of Leicester

85 year old lady with chronic lower leg lymphoedema, obesity, type 2 Diabetes mellitus, arthritis and history of recurrent cellulitis.



Due to ill fitted shoes and diabetic neuropathy the patient had developed a grade 2 pressure ulcer to left foot, medial aspect of 1st MTH, size 2cm x 2cm. On initial assessment the ulcer appeared inflamed, erythematous, with moderate serous exudate, increased local pain and surrounding maceration. Both legs were grossly oedematous with deepened skin

fold, hyperkeratosis, papillomatosis and red inflamed skin to dorsal aspects of both feet.



Actilite was applied to left foot ulcer and both feet - dorsal aspect, to provide antibacterial properties, reduce inflammation and encourage ulcer healing. The dressings were secured with padding and toe to knee retention/crepe bandages. Dressings were changed every three days, while this was incorporated into regular skin care routine i.e. washing of both legs in warm tap water to

remove skin debris and moisturising dry, scaly skin with emollient.



8 days later: left foot pressure ulcer has fully epithelialised and erythema has subsided. Following ABPIs which showed good vascular supply, lymphoedema treatment continued with 3 - 4 layer compression bandaging and skin care. In this case the use of Actilite resulted in reduced inflammation, allowed ulcer to heal, improved skin texture, prevented development of cellulitis.

Elderly female patient with long term right leg ulceration

Jivka Dimitrova - Tissue Viability Specialist Nurse - University Hospital of Leicester

85 year old lady admitted to the stroke unit following right frontal CVA, past medical history of Peripheral Vascular Disease, left below knee amputation and long term right leg ulceration.



Initial presentation: 8cm x 2cm full thickness skin ulcer; just above right medial malleolus, 100% sloughy, surrounding skin irritated, inflamed, high exudate levels with offensive odour;

chronic varicous eczema, hyperkeratosis and ulceration between 3rd and 4th toes due to fungal eczema. ABPI was within the acceptable range therefore compression bandaging therapy continued whilst Actilite was used as primary



dressing to all ulcers and between toes. The aim of the dressing was to encourage desloughing, reduce bacterial load, reduce inflammation, and provide antifungal

properties. Two and three weeks later, skin between the toes had healed and the fungal eczema cleared up. 60 - 70 % of the ulcer bed was clean and granulating,



ulceration was reducing in size and depth, exudate levels were reduced considerably and there was no odour. At this point the patient was transferred to a community hospital for rehabilitation.

Male diabetic patient with leg ulceration

Jayne Birchall - Tissue Viability Specialist Nurse - University Hospital of Leicester

A 74 year old male with a thirteen year history of type 2 diabetes mellitus visited out-patients diabetic foot clinic. He also has a seven year history of Charcot joint to his right foot. His diabetes is controlled with insulin.

On examination he had two areas of ulceration to plantar and dorsal aspect of right foot. He was admitted as an inpatient for debridement of wounds by orthopaedic surgeons. Following debridement the ulcers appeared infected with surrounding cellulitis. Patient continued to attend foot clinic on a weekly basis where the wounds were reviewed by tissue viability and the use

of Actilite was recommended. He was also treated with Doxycycline. The ward followed the same regime, resulting in a dressing change every three days. On discharge, the wound remained clean, granulation tissue had started to form around wound margins and the cellulitis had subsided. Two months later the gentleman returned to foot clinic, having visited his local trauma clinic for dressing changes in the interim. On examination the wound to the plantar aspect appeared to be larger in size, surrounding skin was macerated and some slough was noted to the wound bed. The patient reporting that a hydrofibre dressing had been used but this was not suiting

him. The wound was sharp debrided by podiatrist back to healthy tissue. Due to the increased risk of recurrent infections in patients with diabetic foot ulcers and the resulting implications on healing, actilite was reapplied for its antimicrobial properties. It was also the preference of the patient as he felt that no other dressing had been as effective. He was sent home with actilite dressings and a letter for the district nurses to continue to change dressing every three days. Two weeks later at follow up in foot clinic, the wound remained clean and granulating with evidence of healing and no evidence of infection or inflammation.

The use of Actilite on a leg ulcer

Pam Kirby - Vascular Nurse Specialist - Kings Mill Hospital

F.P. a diabetic patient is aged 72 with a truly mixed aetiology. He has varicose veins causing venous hypertension resulting in many episodes of bleeding via the ulcer bed when he was admitted to A&E.



The patient also has narrowing of the superficial femoral artery so compression

is not possible for the time being, but he has been managed using the Actilite dressing, with an Eclipse pad for absorption, soft wadding and a retention bandage from toe to knee.



Although the size is not greatly reduced, the top end has closed and the length of the wound has reduced by 2cms. There is

a marked improvement in the granulation tissue and has filled the base of the wound.



During the period of the evaluation he had a high tie of his varicose veins to remove the head of pressure with the hope of reducing the episodes of haemorrhage, with success.

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